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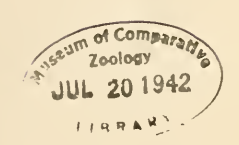
Tomo XI

BUENOS AIRES

IMPRENTA DE PABLO E. CONI É HIJOS, ESPECIAL PARA OBRAS

60 — CALLE ALSINA — 60

1887


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BOLETIN

DE LA

ACADEMIA NACIONAL DE CIENCIAS

EN

CÓRDOBA

(República Argentina)

Setiembre de 1887. — Tomo XI. — Entrega 1ª

La Correspondencia y Cange deberán ser dirigidos así :

Academia Nacional de Ciencias

CÓRDOBA
(República Argentina)

BUENOS AIRES

IMPRENTA DE PABLO E. CONI É HIJOS, ESPECIAL PARA OBRAS

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ACADEMIA NACIONAL DE CIENCIAS

DE LA

REPÚBLICA ARGENTINA (EN CÓRDOBA

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FUNGI PATAGONICI

AUCTORE

CAROLO SPEGAZZINI

HYMENOMYCETEAE Fr.

1. Agaricus (*Lepiota*) bonaerensis Speg. — Fung. Arg. pug. III, n. 1.
   Hab. Vulgatus in herbosis secus *Rio Negro* et prope *Bahia Blanca*, Mart. 1883.

2. ? Agaricus (*Tricholoma*) magellanicus Speg. (n. sp.).
   Diag. Pileus applanatus (7″ diam.), vix marginem versus undulato-incurvulus, sordide fulvescens v. albo-subochraceus, exumbonatus, glaberrimus, laevissimus, non hygrophanus. Lamellae albae, subconfertae, antice acutiusculae, postice rotundato-sinuatae (3″ long. × 8‴ lat.), crassiusculae, acie tenuiores mox denticulato-subrepandae, carne pilei arcte adnatae. Stipes rectus, longiusculus, crassus (7″ long. × 18-20‴ diam.), albus, laevissimus, farctus, saepe compressulus ac subtortus.
   Hab. In campis prope *Gregory bay* in *Freto magellanico*, April. 1882.

Obs. Caro pilei tenuis vix centro bene evoluta, alba, subexsucca, flocculosa, sub sectione dilute fuscescens ; illa stipitis fibrosa tenacella, alba ; velum nullum ; cutis pileo facile separabilis ; odor funginus gratus saporque acidulus parum manifestus.

Species notis nonnullis *Cortinario talo* Fr. accedens, sed characteres sporologici deficiunt.

3. Agaricus (*Clitocybe*) tehuelches Speg. (n. sp.).

Diag. Cyathiformis ; pileus hemisphaericus v. lenticularis, centro plus minusve umbilicatus (10-15‴ diam.), extrius, testaceus v. testaceo-rubescens, margine integro, obtusulo, repandulo, hygrophanus (?). Lamellae paucae, distantes, crassiusculae, non raro deorsum confluentes, arcuatae, dimacriae, antice obtusiuscule acutatae, postice acutato-decurrentes, albo-ceraceae v. subroseolae, acie integra, crassiuscula, saepius fuscescente donatae. Stipes saepius deorsum attenuatus, lamellis concolor, glaberrimus, laevissimus, vix pruinuloso-radicatus, farctus (10-12‴ long. $\times$ 2‴ crass.).

Hab. Ad terram muscosam in *Gregory bay* in *Freto magellanico*, April. 1882.

Obs. Caro stipitis et pilei lamellis arcte adnata, hygrophana, carneola, succosa. Sporae albae.

Species ad Omphalias nonnihil vergens et *Ag. pyxidato* Bull. proxima.

4. Agaricus (*Clitocybe*) patagonicum Speg. (n. sp.).

Diag. Pileus primo hemisphaericus dein explanato-umbilicatus (1-2″ diam.), laevissimus, glaberrimus, margine integer plus minusve undulato-repandus, laxe et vix manifeste striatus (non plicatus), sordide albus v. albescenti-cinerascens, hygrophanus. Lamellae subconfertae, polimacriae, arcuatae (2‴ lat.), antice obtusato-rotundatae, postice attenuato-decurrentes, a sti-

pite facillime secedentes, acie integerrimae, pileo concolores v. pallidiores. Stipes fistulosus, teres vix basi subincrassatulus (15‴ long. × 2-3‴ diam.), laevis, glaberrimus, fibrosulus, pileo concolor, mycelio albo-araneoso v. gossypinulo latiusciule expanso radicatus. Sporae albae.

Hab. In pratis arenosis sub umbra arbuscularum prope *Punta Arenas* in *Freto magellanico*, April 1882.

Obs. Caro pilei tenuis, hygrophana, mollis, lamellis adnata; illa stipitis fibrosa. Sporae hyalinae, globosae (3-3,5 μ diam.) laeves.

Species *Ag. expallenti* Pers. valde affinis.

5. Agaricus (*Clitocybe*) laccatus Scop. — Fr., Hym. Eurp. p. 108, n. 332.

Hab. Ad terram herbosam sub umbra *Salicis humboldtianae* secus *Rio Negro,* Mart. 1883.

Obs. Species valde polymorpha, sine dubio cum illa europea identica; specimina patagonica saepius colore obscuriore et pileo margine repando-sublobato gaudent.

6. Agaricus (*Mycena*) exquisitus Hook. — Fl. Ant., vol. II, p. 447.

Hab. Ad ramos dejectos putrescentes *Chiliotrichi amelloidis* prope *Punta Arenas,* Aug. 1882.

Obs. Basipes; pusillus, fulvus, puberulus, sparsus; pileus primo subhemisphaericus, margine intus subincurvulus, densiuscule pilosus, dein subcampanulato-expansus, (quandoque irregularis), dense puberulus, margine acutiusculus, rectus, integer, fulvo-melleus, centro intensius coloratus; lamellae paucae, distantes, 4 v. 6 longiores, truncato-adnatae, non decurrentes nec sinuatae, pro ratione crassiusculae, acie integrae, cum minoribus plus minusve evolutis alternae, albae v. dilutissime albo-melleae; stipes centralis sub pileo abrupte incur-

vatus, teres, exilis, longitudine latitudinem pilei aequans, eoque concolor v. vix obscurior, in juventute pilosus, dein superne tantum ut pileus puberulus, basi irregulariter innatus, subinsititius, mycelio dilatatulo, araneoso-compactiusculo, albo donatus. Pileus nec hygrophanus nec striatus; sporae ignotae.

7. Agaricus (*Mycena*) capillaris Schum. — Fr., Hym. Eurp. p. 153, n. 519.

Hab. Ad ramulos nec non folia coacervata putrescentia in sylvis prope *Voces bay* sub *Monte Tarn,* Maj. 1882.

8. Agaricus (*Mycena*) purus Prs. — Fr., Hym. Eurp., p. 133, n. 434.

Hab. Ad folia nec non ramenta coacervata putrescentia prope *Patagones*, Aug. 1883.

9. Agaricus (*Pleurotus*) applicatus Batsch. — Fr., Hym. Eurp. p. 180, n. 635.

Hab. Ad ramos emortuos decorticatos *Embotryi coccinei* prope *Cabo Negro* in *Freto magellanico*, Jul. 1882.

10. Agaricus (*Pleurotus*) berberidicolus Speg. (n. sp.).

Diag. Pusillus, gregarius, resupinato-scutellatus, ater, lamellis albis; pileus scutatus, dorso adfixo, plus minusve regularis, saepius postice sinuatus v. fissus, siccus velutinus (sed non pruinulosus), udus glaber, dense viscosus, ater v. atro-brunneus, margine recto, integro, in juventute involuto; lamellae confertiusculae, polimacriae, strictae, crassiusculae, acie integrae, centrum pilei non attingentes.

Hab. Ad truncos decorticatos cariosos *Berberidis ilicifoliae* in sylvis prope *Punta Arenas*, Jul. 1882.

Obs. Praecedenti statura, colore affinis, pileo tamen glabro, lamellis albis confertis recedens. Margo pilei lamellas nonnihil excedens, strictus, etiam inter illas brunneus.

11. AGARICUS (*Pleurotus*) GOSSYPINULUS Speg. (n. sp.).

Diag. Pusillus, candidus, gregarius, dense gossypino-puberulus; pilei excentrici, subresupinati, dimidiati v. subcupulati, deorsum sinuati, stipite minimo infero donati v. sessiles, superne dense ac delicatissime gossypino-pilosuli, margine acutiusculo, primo regulariter intus subinvoluto dein recto repandulo. Lamellae paucae, strictae, polimacriae, utrinque acutiusculae, plus minusve evolutae, marginales minores, candidae subveniformes, glaberrimae, laevissimae, integrae.

Hab. Ad corticem putrescentem *Fagi obliquae* prope *Punta Arenas*, Jul. 1882.

Obs. Species statura et colore *Ag. chioneo* Pers. cognata.

12. AGARICUS (*Pleurotus*) TARNENSIS Speg. (n. sp.).

Diag. Solitarius; pileus lobato-subdimidiatus, profunde umbilicato-cyathiformis (4-4,5″ diam.) sordide fusco-carneus, laevissimus, glaberrimus (vix sub iove pluvio viscidulus), margine acutus, curvulus, repandulus, plus minusve perspicue striatus (an sulcatus?), pulchre hygrophanus. Lamellae latiusculae, crassiusculae, ceraceae, polimacriae, saepe basi subconfluentes, antice obtusato-rotundatae, postice attenuato-acutatae, adnato-decurrentes, in juventute subcarneo-pruinulosae, in senectute dilute vinoso-maculatae. Stipes (2,5″ long. $\times$ 1″ crass.) irregulariter compressus, late fistulosus, sordide albus v. albo-subcarneus, basi irregulariter adfixus, arrhizus, glaberrimus, laevissimus. Sporae cylindraceo-ellipticae, utrinque obtuse rotundatae ($6\text{-}6,5 \times 2,5\text{-}3\ \mu$), inferne excentrice apiculatae, hyalinae.

13. AGARICUS (*Claudopus*) VARIABILIS Pers. — Fr., Hym. Eurp. p. 213, n. 781.

Hab. Ad truncos putrescentes dejectos *Fagi antar-*

cticae in sylvis prope *Voces bay* sub *Monte Tarn*, Maj. 1882.

Obs. Pileus videtur e duobus dimidiatis, oppositis basi confluentibus fere efformatus; caro pilei stipitisque cum hymenio confluens, primo alba dein pileo concolor.

Hab. Ad ramos dejectos putrescentes *Mayteni magellanici* in sylvis prope *Voces bay*, Maj. 1882.

14. Agaricus (*Pholiota*) subflammans Speg. (n. sp.).

Diag. Fulvo-cinnamomeus; pileus hemisphaerico-explanatus (2-3″ diam.) margine acutiusculo primo recto dein nonnihil revoluto, hygrophanus (?), minute (sed non semper) squamulosus, pulchre ochraceo-v. cinnamomeo-fulvus. Lamellae membranaceae, subconfertae, polimacriae, pileo vix pallidiores, in senectute subcarneo-ochraceae, antice acutato-rotundatae, postice attenuatae, adnato-decurrentes, acie integerrimae. Stipes fistulosus teres (3-3,5″ long. × 3‴ diam.), centralis, inferne incurvus, sordide ochraceo-carneus v. fulvus, ad tertium superum laevissimus, glaberrimus, ad tertium inferum subanulatim squamulosus (an veli vestigia?), squamulis majusculis saepius deorsum albicantibus, basi incrassatulo-rotundatus, mycelio albo, hispidulo, muscis lignoque putrido adnato. Sporae ellipticae, utrinque obtuse rotundatae v. subtruncatae (4-5 × 2-2,5 μ), laevissimae, ferrugineae.

Hab. Ad truncos dejectos putrescentes *Berberidis ilicifoliae* in *Voces bay*, Maj. 1882.

Obs. Caro pilei lamellis stipiteque arcte adnata, pileo concolor, subhygrophana. Haec species *Ag. flammanti* Fr. valde affinis, sed rite distincta; an melius *Flammulis* adscribenda?.

15. Agaricus (*Flammula*) Frowardii Speg. (n. sp.).

Diag. Solitarius, flavo- v. roseo -virescens, majusculus;

pileus applanato-expansus (6-7″ diam.), centro non v. vix umbonatulus, umbone nonnihil umbilicatulo, margine integro undulato, non v. vix revoluto, hygrophanus, centro rufescenti-fulvus, caeterum fulvo-v. melleo-virescens. Stipes teres, longus (10-12″ long. × 6-8‴ crass.), laevissimus, glaberrimus, latissime fistulosus, fibrosulo-fragilis, fulvo-v. melleo-flavicans, submicans, rectus. Lamellae confertae, tenues, membranaceae, polimacriae, strictiusculae (3‴ lat.), utrinque acutatae, adnato-subdecurrentes, pallide lutescenti-v. fulvescenti-virescentes. Sporae subgloboso-ellipticae v. ovatae, inferne apiculatae (5-6 × 4 μ), in sicco compressae, pallide ferrugineae.

Hab. Ad terram inter folia coacervata in sylvis prope *Voces bay*, Maj. 1882.

Obs. Species pulcherrima. Stipes quandoque inferne squamulis fuscescentibus laxe vestitus; lamellae breviores postice longe attenuato-adscendentes, longiores truncato-adnatae saepe denticulo subdecurrente donatae. Caro pilei tenuis cum stipite et hymenio continua, succosa, albo-subflavescens, hygrophana; illa stipitis flavescens, fibrosa. Velum nullum.

16. Agaricus (*Naucoria*) melinoides Fr. — Hym. Eurp., p. 257, n. 962.

Hab. Vulgatus ad terram in pratis marittimis prope *Cabo Possession* in *Freto Magellanico,* April. 1882.

Obs. Pileus hemisphaerico-rotundatus (15‴ diam.) non v. vix obtusissime subumbonatus, margine latiuscule inflexo, regulari v. plus minusve repando-undulato, pulchre testaceo-v. castaneo-fulvescens, centro obscurior, glaberrimus, laevissimus v. saepe minute papillulosus. Lamellae latiusculae, albo-virescentes, di-tri-macriae, plus minusve confertae, antice obtuse rotundatae, postice truncato-adnatae. Stipes rigidulus, teres, curtus

(2″ long. × 3‴ crass.) basin versus saepius attenuatus, tenacellus, fibrosulus, laevis v. vix lenissime longitudinaliter striatus (in juventute saepe dense grosseque luteo-papillosus), tenuiter fistulosus, obscuriuscule rufescens vix superne pallidior ac sublutescens, basi nodulosus intense ochraceus et vix myceliferus. Caro pilei subexsucca, compacta, alba v. dilute lutescens v. virescens ; illa stipitis fibrosa, fulva v. dilute subochracea, lamellis arcte adnata.

Species saepius dense gregaria v. melius 3-5-coespitosa, parvula, pulchella, odore et sapore nullis. Sporae ellipticae, utrinque obtuse rotundatae (6-7 × 3 μ), laeves, ferrugineae.

Specimina sparsa duplo majora pileo irregulari saepe etiam inveni, sed nullo modo a praecedenti separanda.

Ut e descriptione constat, species nonnihil a typo friesiano recedit ; an varietas?.

17. Agaricus (*Naucoria*) gregorianus Speg. (n. sp.).

Diag. Parvulus, solitarius, 3-5-coespitosus ; pileus hemisphaericus (10-15‴ diam.), ochraceus v. testaceus v. rubescenti-fuscus, glaberrimus, laevissimus, margine integro ; lamellae utrinque rotundatae, antice obtusiusculae, postice adnatae, 3-macriae, ochraceae, pileo vix pallidiores ; stipes teres, tenuis (2″ long. × 2‴ crass.), non v. vix deorsum attenuatus, glaberrimus, laevissimus, tenacello-fibrosulus, basi parce mycelifero-radicatus, minute fistulosus, pileo concolor.

Hab. Ad muscos inter gramina in *Gregory bay*, Apr. 1886.

Obs. Caro pilei tenuis vix centro evoluta, pauca, pallide fulva, cum stipite hymenioque continua.

Hujus speciei commixtae varietates (an species?) duo occurrunt:

I[a] Pileo pallidiore in senectute saepius explanato ac re-

voluto, decolorato, hygrophano, margine densiuscule fusco-striato.

II^a Pileo obscuriore, vix hygrophano, margine extrio.

18. Agaricus (*Galera*) tener Schaeff. — Fr., Hym. Eurp., p. 267, n. 1003.

Hab. Abunde in herbosis umbrosis secus *Rio Negro* prope *Patagones*, Sept. 1883.

19. Agaricus (*Crepidotus*) brunswickianus Speg. (n. sp.).

Diag. Pileus dimidiatus (3″ lat. maj. × 1,5″ lat. min.), antice rotundatus, postice subreniformis v. cuneatus, in stipite brevissimo, albo, dense irregulariterque papillato-tomentosulo, crassiusculo productus, margine integro, incurvo donatus, glaber, laevissimus, pallide melleus v. fulvo-lutescens, sub iove pluvio hygrophanus; lamellae pileo concolores confertiusculae, polimacriae, antice rotundato-acutatae, postice attenuato-decurrentes, non confluentes, acie integerrimae. Sporae globoso-ovoideae v. ellipticae (5-6 × 3-4 μ), inferne apiculatae, dense minuteque asperulae, grosse 1-guttulatae, ferrugineae.

Hab. Ad ramos dejectos *Fagi antarcticae* in sylvis prope *Voces bay*, Maj. 1882.

Obs. Caro pilei subtenuis, flocculosa, alba, hymeniophoro concreta; mycelio albo, hispidulo, parum evoluto. Species pulchella *Ag. calolepidi* Fr. peraffinis, sed certe distincta.

20. Agaricus (*Psalliota*) campestris L. — Fr., Hym. Eurp. p. 279, n. 1052.

Hab. Vulgatus per tota Patagonia prope *Bahia Blanca*, *Rio Negro*, *Chubut*, *Santa Cruz*, et *Gregory bay*, per ann. 1882-83.

21. Agaricus (*Stropharia*) stercorarius Fr.— Hym. Eurp. p. 287, n. 1079.

Hab. In fimo equino nec non vaccino in *Santa Cruz* et *Gregory bay*, ann. 1882.

22. Agaricus (*Hypholoma*) appendiculatus Bull. — Fr., Hym. Eurp. p. 296, n. 1115.
Hab. Ad basin truncorum in sylvis prope *Punta Arenas*, April. 1882.

23. Agaricus (*Paneolus*) separatus L. — Fr., Hym. Eurp. p. 310, n. 1175.
Hab. In fimo vaccino in pratis uliginosis prope *Patagones* et *Santa Cruz*, per ann. 1882-83.

24. Agaricus (*Paneolus*) papilionaceus Fr. — Hym. Eurp. p. 311, n. 1183.
Hab. In stercore equino in *Santa Cruz* et in vaccino prope *Punta Arenas,* Aest. et autm. 1882.

25. Agaricus (*Paneolus*) uliginicolus Speg. (n. sp.).
Diag. Pileus primo hemisphaerico-subglobosus, margine stipitem versus incurvus, dein subcampanulatus v. hemisphaerico-expansus, non umbonatus, laevissimus, glaberrimus, griseo-testaceus v. sordide fusco-fulvescens, magnitudine ludens, non hygrophanus, nec viscosus; lamellae latae, primo profunde sinuatae, dein adnato-sinuatae, confertiusculae, crassiusculae, 2-3-macriae, antice obtuse rotundatae, postice truncato-adnatae, acie obtusae, pallescentes, integrae, fuligineo-atrae, non perlatae; stipes fistulosus, fibrosus, teres, deorsum saepius attenuatus, laevis v. longitudinaliter striatus, albo-griseus, pruinula granulosa alba densiuscula obtectus.
Hab. Vulgatissimus in campis uliginosis prope *Gregory bay,* April. 1882.
Obs. Mycelium vix evolutum, gossypino-album, nodulosum; caro pilei tenuissima stipite lamellisque adnata;

velum nullum ; statura praecedentis v. minor.

Species inter *Ag. campanulatum* L. et *Ag. papilionaceum* Fr. statura ac caeteris characteribus vere intermedia.

26. Coprinus ovatus Fr.— Hym. Eurp. p. 320, n. 1.
Hab. Ad latera viarum prope *Bahia Blanca*, Aug. 1883.

27. Coprinus fimetarius Fr. — Hym. eurp. p. 324, n. 18.
Hab. Ad fimum vaccinum nec non equinum in campis prope *Punta Arenas*, *Santa Cruz* et *Patagones* per ann. 1882-83.

28. Coprinus Hendersonii Berk.— Fr., Hym. Eurp. p. 329, n. 36.
Hab. In fimo vaccino in sylvis prope *Punta Arenas*, Jul. 1882.

29. Coprinus plicatilis Fr.— Hym. Eurp. p. 331, n. 50.
Hab. Ad ripas *Rio Negro* sub umbra ad terram stillicidiosam detritis linteis inmixta, Sept. 1883.

30. Coprinus perpusillus Speg.— Fung. Arg. pug. II, p. 6, n. 11.
Hab. In fimo vaccino in pratis uliginosis prope *Santa Cruz*, Jan. 1882.

31. Cortinarius (*Phlegmacium*) magellanicus Speg. (n. sp.).
Diag. Solitarius (5-7″ alt.), totus intense violaceo-coeruleus. Pileus plus minusve sordide violaceus, hemisphaericus (2-2,5″ diam.), centro obtusatus ac fuscescenti-pallescens, laevissimus, sub iove pluvio muco vestitus, margine acuto vix lamellas excedente, subinflexo, subcrenulato donatus, subhygrophanus ; lamellae latae, subconfertae, antice acutatae, deorsum

latiuscule rotundatae, adnato-sinuatae, primo albae, dein cinnamomeae, acie integrae, trimacriae, crassiusculae, rigidulae; stipes elongatus (4-5″ alt. × 5‴ crass.), plus minusve rectus, teres, basi sensim incrassatus ac mycelio fibroso dense intricato insidenti-radicatus, late fistulosus, basi excepta, ad partem superam sub pileo, anulo membranaceo, longitudinaliter plicatulo, brevi donatus, e violaceo coerulescens hinc inde pallescens, inferne pallidissimus v. sordidus. Sporae ellipticae (9-10 × 5 μ) utrinque plus minusve rotundatae, inferne inaequilateraliter apiculatae, grosse 1-guttulatae non v. vix minute denseque asperulo-granulosae, ferrugineae.

Hab. Ad terram inter folia ac ramenta dejecta putrescentia in sylvis *Voces bay*, Maj. 1882.

Obs. Velum araneoso-fibrosum, muco pilei defluente saepius indutum, cinnamomeum, mox evanescens. Caro pilei succosa, subviolacea, tenuis, hymeniophoro adnata; illa stipitis a lamellis discreta, fibrosa, concolor.

32. Cortinarius (*Myxacium*) tarnensis Speg. (n. sp.).

Diag. Solitarius (5-6″ alt.), totus albus. Pileus hemisphaerico-expansus, hinc inde varie depressus v. subrepandus (3-3,5″ diam.), centro non v. vix fuscescens, glaberrimus, laevissimus, sub iove pluvio muco obtectus, margine semel involutus, crassiusculus, integer, albus; lamellae pro pilei ratione parvulae, antice acutatae deorsum rotundato-angulatae, primo albae, dein pallide cinnamomeae, sinuatae, a stipite discretae, cum pilei carne continuae, acie integrae, 2-3-macriae. Stipes (3-3,5″ alt. × 2-2,5″ crass.) pro ratione curtus, crassus, farctus basi subbulbosus, extus albus laevissimus, glaberrimus, bulbo sub iove pluvio viscoso. Sporae ellipticae v. ovoideae, grosse 1-guttulatae (11-13,5 × 5,5-7 μ), dense ruguloso-papillulosae, ferrugineae.

Hab. Ad folia dejecta putrescentia *Fagi antarcticae* in sylvis *Voces bay*, Maj. 1882.

Obs. Velum araneoso-fibrosum, cinnamomeum, mox evanidum. Caro pilei succosa, cum lamellis continua, alba, per aetatem fuscescens, mox larvis comedita; illa stipitis lamellis discreta, subfibrosa. Pileus madidus striis radiantibus intense violaceis, densis, longiusculis notatus.

33. CORTINARIUS (*Myxacium*) DARWINII Speg. (n. sp.).

Diag. Solitarius, majusculus (7-8″ alt.), albus; pileus applanato-expansus (5″ diam.), plus minusve undulatus, quandoque subumbonatus, quandoque subumbilicatus, margine curvulus, acutus, lamellas nonnihil excedens, integer repandusve, laevissimus, glaberrimus, sub iove pluvio viscoso ac sordide ex albo argenteus, sericeo-nitens; lamellae polimacriae, antice acutae, deorsum adnato-sinuatae, a stipite facile secedentes, dilute fulvo-ochraceae, confertiusculae, membranaceae, acie integerrimae. Stipes pileo concolor, farctus teres (7″ alt. × 1,5″ crass.), crassiusculus, basi incrassatulus, obtusatus ac plicato-radicatus, laevissimus, vix ad partem dimidiam inferam striis fuscescenti-cinnamomeis, raris, irregulariter reticulato-notatus. Sporae ellipticae v. ovoideae, utrinque acutiuscule rotundatae (8-9 × 4-4,5 μ), grosse 1-guttulatae, minute denseque granuloso-asperulae, ferrugineae.

Hab. Ad folia dejecta putrescentia *Fagi antarcticae* in sylvis prope *Voces bay*, Maj. 1882.

Obs. Caro stipitis pileique alba, succosa, subspongiosa, inodora.

34. CORTINARIUS (*Dermocybe*) HOOKERII, Speg. (n. sp.).

Diag. Solitarius v. laxissime gregarius (7″ alt.), lutescenti-cinnamomeus. Pileus primo subglobosus, mar-

gine intus vergens, dein hemisphaerico-expansus (2,5″ diam.), margine acutiusculus, vix lamellas excedens, integer v. repandulus, glaberrimus, laevissimus (sub iove pluvio viscidulus), ochraceus, fulvus v. melleo-cervinus; lamellae polimacriae, latiusculae, acie integerrimae, antice acutatae, postice truncatae (primo adnato-subdecurrentes), adnato-sinuatae. Stipes teres elongatus (5-6″ long. × 4-5‴ lat.), rectus v. subflexuosus, sordide albo-lutescens, glaber, laevis, tenui fistulosus, rigidulus, basi non v. vix incrassatus, mycelio parco albo, gossypino subvestito-radicatus. Sporae ellipticae, sursum rotundatae deorsum acutatae, grosse 1-guttulatae (8-9,5 × 4-5 μ) obscure ferrugineae.

Hab. Ad truncos putrescentes humo infossos in sylvis *Voces bay*, Maj. 1882.

Obs. Velum araneosum, cinnamomeum, margine pilei et parte media stipitis adfixus tantum in prima aetate praesens, mox evanidum. Caro sordide alba, compactiuscula, illa pilei hymeniophoro continua, illa stipitis discreta.

35. Schizophyllum commune Grev. — Fr., Hym. Eurp. p. 492.

Hab. Ad palos fabrefactos diu intemperiis expositos prope *Bahia Blanca* et in *Puerto Deseado,* per ann. 1882-83.

36. Marasmius (*Mycena*) sphaerodermus Speg. — Fung. Arg. pug. I, n. 10.

Hab. Ad folia dejecta putrescentia *Berberidis heterophyllae* sub dumetis, *Gregory bay*, Apr. et Jun. 1882.

Obs. Specimina patagonica saepius pileus orbata v. obliterata, attamen omnibus characteribus cum forma bonaërensi identica videtur.

37. Polyporus australis Fr. — Hym. Eurp. p. 556, n. 124.
Hab. Ad truncos *Fagi obliquae* in sylvis prope *Punta Arenas* et *Nahuel-huapí*, per ann. 1882-83.

38. Polyporus igniarius Fr. — Hym. Eurp. p. 559, n. 132.
Hab. Ad truncos vetustos *Pyri mali* in sylvis secus *Rio Limay*, Sept. 1884.
Obs. Specimen valde mancum sed cum typo europaeo plane congruens.

39. Polyporus gilvus Schwn.—Fr., Epicr. Syst. Myc. p. 455, n. 111.
Hab. Vulgatus ad truncos salicinos vetustos secus *Rio Negro*, Aug. 1883.

40. Polyporus salicinus Fr. — Hym. Eurp. p. 560, n. 138.
Hab. Ad truncos salicinos cum praecedente sed rarius, secus *Rio Negro*, Aug. 1883.

41. Polyporus pulcher Speg. — Fung. Arg. pug. III, n. 13.
Hab. In trunco *Eucalypti globuli* vetusto ac subputrescente in campis prope *Bahia Blanca*, Aug. 1886.

42. Polyporus sanguineus L. — Fr., Epicr. Syst. Myc. p. 444, n. 64.
Hab. Vulgatus ad truncos salicinos dejectos putrescentes prope *Patagones* et *Bahia Blanca*, Sept. 1883.
Obs. Specimina patagonica omnia sessilia nec non saepissime (in juventute praecipue) effuso-reflexa !

43. Polyporus adustus Willd. — Fr., Hym. Eurp. p. 549, n. 98.
Hab. Vulgatissimus ad truncos salicinos cariosos secus *Rio Negro*, Aug. 1883.

44. Polyporus versicolor L. — Fr., Hym. eurp. p. 568, n. 172.

Hab. Vulgatus ad truncos putrescentes v. emortuos prope *Punta Arenas* et *Patagones*, per ann. 1882-83.

45. POLYPORUS VAPORARIUS P. — Fr., Hym. Eurp. p. 579, n. 221.

Hab. Ad trabem fabrefactam putrescentem in sylvis prope *Punta Arenas*, Apr. 1882.

46. FISTULINA ANTARCTICA Speg. (n. sp.).

Diag. Pileus dimidiato-unguiculatus, antice margine crasse rotundatus, repandus v. difformis, postice subcordatus v. subcuneatus, sessilis v. stipite crasso tuberculoso-amorfo plus minusve evoluto donatus, magnitudine summopere ludens (3-50″ diam.), superne convexus, laevis, udus submucosus, siccus subvernicosus ac nitens, hinc inde squamulis minutis fimbriatulis inspersus, e fulvo-v. nigro-sanguineus, inferne applanato-undulatus, saepius irregulariter subrimoso-diffractus ; tubuli inferi elongati (3-6‴ long.), dense constipati, a pileo facile secedentes, liberi, sordide v. pallide sanguinei, tactu nigrescentes, gracillimi, ore irregulari, sublacero concolore donati. Caro compacto-mollis, succosa, tenax, in senectute subspongiosa, pileo pallidior v. subfulvescens, fibris crassis obscurioribus v. pallidioribus, ramoso-anastomosantibus dense percursa. Sporae globoso-ovoideae v. subellipticae ($5\text{-}7 \times 3\text{-}4\ \mu$), inferne inaequilateraliter apiculatae, granuloso-farctae e hyalino pallidissime rubiginosae.

Hab. Ad truncos *Fagi antarcticae* vulgatissima prope *Punta Arenas* et in sylvis totius *Patagoniae* australioris, per ann. 1882-84.

Obs. Pileus quandoque glaberrimus, quandoque squamulis densis (ad marginem praecipue) vestitus. Basidia obovato-clavata, apice obtusissime rotundata ($15 \times 5\text{-}6\ \mu$) 3-4-sterigmatophora, fusco-rubiginosa.

Aborigeni *Aonikenken* (vulgo *tehuelches*) illam, etsi sat tenacem, crudam comedunt et *Carróo-shâne* vocant.

47. Irpex lacteus Fr. — Hym. Eurp. p. 621, n. 7.
Hab. Ad truncos nec non ramulos subdecorticatos *Fagorum* prope *Punta Arenas*, Jun. 1882.

48. Stereum hirsutum Fr. — Hym. Eurp. pag. 639, n. 6.
Hab. Ad dolia vetusta plantarum in cavaediis *Bahia Blanca*, Sept. 1883.

49. Stereum rugosum Fr. — Hym. Eurp. pag. 643, n. 23.
Hab. Ad truncos *salicinos?* fluitatos in *Rio Negro*, Aug. 1883.

50. Corticium lacteum Fr. — Hym. eurp. pag. 649, n. 11.
Hab. Ad ramos dejectos putrescentes *Fagi antarcticae* prope *Punta Arenas*, Apr. 1882.

51. Corticium calceum Fr. — Hym. Eurp. pag. 652, n. 25.
Hab. Ad palos *populinos?* vetustos *Vites* sustinentes prope *Bahia Blanca*, Sept. 1883.

52. Corticium rosellum Speg. — Fung. Arg. pug. III, n. 25.
Hab. Ad truncos emortuos *Persicae vulgaris* prope *Bahia Blanca,* Aug. 1886.

53. Clavaria (*Ramaria*) patagonica Speg. (n. sp.).
Diag. Solitaria, circumscriptione subglobosa (5″ alt. × 5″ diam.), leucospora, tenaciuscula; truncus crassus (15-20‴ alt. × 5-6‴ crass.), albus, irregularis, ramis dense fasciculatis, saepius basi confluentibus, rectis v. flexuosis, crassiusculis, longitudinaliter striatis ac canaliculatis, ex aurantio ochraceis, apice densiuscule ramuloso-botryosis, ramulis brevissime ramululosis, apice truncato-lobulatis, obscurioribus.

Hab. Ad terram inter radices *Senecionis* speciei in collinis aridis prope *Gregory bay*, Apr. 1882.

Obs. Species *Clavariae flavae* Schaeff. affinis, sed mox distinguenda.

54. Calocera cornea Batsch. — Fr., Hym. Eurp. pag. 680, n. 6.

Hab. Ad truncos emarcidos cariosos *Fagi antarcticae* in *Cabo Negro*, Jun. 1882.

55. Tremella lutescens Pers. — Fr., Hym. Eurp. p. 690, n. 5.

Hab. Ad ramos fagineos dejectos putrescentes prope *Punta Arenas*, Apr. 1882.

56. Hirneola polytricha Mntg. — Fr., Fung. Natal. pag. 26, n. 5.

Hab. Ad truncos salicinos cariosos secus in *Rio Negro*, Aug. 1886.

57. Hirneola antarctica Speg. (n. sp.).

Diag. Cupulae brunneae hemisphaericae v. vix irregulares (2-5″ diam.), crassiusculae (0,5-2‴ crass.), laxe gregariae sessiles, extus dense venoso-plicatae, ad basin praecipue minute laxeque pruinuloso-furfuraceae, margine integerrimo, obtusiusculo, rotundato, intus glabrae, laevissimae, vix hinc inde undulatae v. subbullosae. Sporae non visae.

Hab. Ad ramos emortuos *Fagi antarcticae* nec non in truncis *Berberidis ilicifoliae* in sylvis prope *Voces bay*, Maj. 1882.

Obs. Cupulae aqua immersae mox revivescentes, extus pallide murino-olivaceae, pellucidae, intus fusco-griseae.

Species *H. corneae* Fr. peraffinis sed satis distincta.

58. Hirneola vitellina Lév. — Fr., Fung. Natal. pag. 27, n. 13.

Hab. Vulgatissima ad ramos languidos v. emortuos *Fagi antarcticae* prope *Punta Arenas*, Jul. 1882.

59. Exobasidium antarcticum Speg. (n. sp.).

Diag. Folii-ramululicolum; folia v. ramuli infecta hypertrophica, longiora, crassiora, atque saepius bullosa, e violaceo-rosea v. rubra, saepe areola plus minusve evoluta flavescente donata, inferne prolifera, albo-farinulosa; sporae minutae cylindraceae v. allantoideae, utrinque plus minusve rotundatae (2-4 × 1 μ), hyalinae.

Hab. Vulgatissimus ad folia viva *Lebetanthi americani* in sylvis e *Cabo Negro* usque ad *Voces bay*, Apr., Maj. et Jun. 1882.

GASTEROMYCETEAE (Fr.) DBy.

60. Sphaerobolus stellatus Fode. — Fr., Syst. Myc. vol. II, p. 309.

Hab. Ad tigillum putrescentem sub dumetis prope *Punta Arenas*, April. 1882.

61. Mycenastrum chilense Mntgn. — Speg., Fung. Arg. pug. IV, n. 242.

Hab. Vulgatissimus in planitie totius *Patagoniae* nordicae, Jun et Jul., per ann. 1883-86.

62. Tulostoma Berteroanum Lév. — Ann. Sc. nat., ser. III, vol. V, p. 166.

Hab. Ad terram sabulosam sub umbra dumetorum insulae *Pavon* in Rio S. Cruz, Jan. 1882.

Obs. Peridia subglobosa (10-15‴ diam.), glabra, membranaceo-coriacella, griseo-v. fulvo-albescentia, ostiolo

fimbriato-penicillato donata, inferne corticis exterioris fragmentis subcupulato-vestita; stipes plus minusve elongatus, squarruloso-squamosus, peridio concolor; gleba fulvo-cinnamomea; sporae globosae v. e mutua pressione angulosae (4 μ diam.), episporio laxissime ac parum perspicue papilluloso.

63. Tulostoma patagonicum Speg. (n. sp.).

Diag. Peridium e globoso hemisphaericum (7-10‴ diam. × 5-8‴ alt.), cartilagineo-membranaceum subfragile, glabrum, laeve, centro rotundatum ac ostiolo latiusculo (1-1,5‴ diam.), rotundo, marginato, integro, prominulo donatum, sordide album, inferne applanatum et ad stipitis confluentiam profunde umbilicatum, fragmentis corticis exterioris arena implexi cupulato-vestitum; stipes teres (5-15‴ long. × 2-2,5‴ crass.), fistulosus, pileo concolor, compressulus ac subtortus, per aetatem fragilis, longitudinaliter fibroso-rugulosus, terra ad medium et ultra infossus; gleba e violascenti v. rubescenti grisea, columella destituta, peridio ubique adnata, e floccis tenuissimis, septulatis, ramulosis, laxissime minuteque asperulis composita; sporae globosae (4-5 μ diam.), laxe grosseque rugöso-papillulatae, majuscule 1-guttulatae, pallide fulvae.

Hab. Ad dunas marittimas insulae *Leones de mar* in Rio S. Cruz, Jan. 1882.

64. Arachnion album Schw. — Speg., Fung. Arg. pug. IV, n. 245.

Hab. Vulgatus ad terram arenosam graminosam prope *Monte Hermoso*, Sept. 1883.

65. Lycoperdon lilacinum (Mntgn. et Brk.) Speg. — Fung. Arg. pug. IV, n. 254.

Hab. Vulgatus secus *Rio Negro* nec non circa *Bahia Blanca*, Aug. 1883-86.

66. Bovista uruguayensis Speg. — Fung. Arg. pug. IV, n. 251.

Hab. Ad terram arenosam sub umbra dumetorum in insula *Pavon* fluminis *Rio S. Cruz*, Jan. 1882.

Obs. Sporae laeves, non v. minutissime papillulato-appendiculatae.

67. Bovista cervina Berk.

Hab. Ad terram graminosam in collinis prope *Punta Arenas*, April. 1882.

Obs. Species praecedenti simillima et facillime una pro altera primo visu sumenda; differt tamen sporis globosis (4-5 μ diam.), minute denseque asperulis ac appendice caudali nonnihil majore, nec non caeteris characteribus externis. Ambae tamen *Bovistae plumbeae* Prs. pluribus notis accedentes et saepissime *Tulostomae* cujusdam formam sessilem simulant.

68. Bovista magellanica Speg. (n. sp.).

Diag. Eubovista; subparvula, subglobosa (1-3″ diam.), superne regulariter convexa, inferne obtuse rotundata, centro non v. vix radiatim rugulosa; peridium exterius absens; interius autem tenui-membranaceum, papyraceo-subcartilagineum, tenacellum, laevissimum, subnitens, deorsum sordide fusco-nigrescens, sursum albescenti-griseum v. subargenteum, per aetatem centro irregulariter ac modice subostiolato-dehiscens; gleba gossypino-compactiuscula, mollissima, homogenea, pulvere sporifero inspersa, tabacino-olivascens; flocci olivaceo-fulvescentes, gracillimi (1-3 μ crass.), simplices, laeves, non v. parcissime septulati; sporae globosae (3-3,5 μ diam.), grosse 1-guttulatae, episporio crassiusculo laxissime minutissimeque asperulo–papilluloso, cauda praelonga (8-9 × 1 μ) appendiculatae, olivascenti-tabacinae.

Hab. Vulgata in collinis graminosis prope *Punta Arenas*, April. 1882.

69. Bovista arachnioides Speg. (n. sp.).

Diag. Eubovista; parvula, irregulariter globosa (6-12''' diam.), superne regulariter convexa, inferne subcoarctata grosseque rugoso-plicata centroque subumbilicato-radiculata; peridium exterius absens; interius autem sordide pallideque griseum, laevissimum, non nitens, crassiusculum, tenacellum, coriacellum, apice irregulariter per aetatem lacero-dehiscens; gleba peridio adnata, flocculoso-grumosa, pallidissime fulvella; flocci tenuissimi, hyalini, parce ramulosi non v. laxissime septulati, laeves; sporae globosae (2,5-3 μ), laevissimae, ecaudatae, grosse 1-guttulatae, chlorinulae.

Hab. Ad terram sabulosam sub umbra dumetorum insulae *Pavon* in *Rio Santa Cruz,* Jan. 1882.

Obs. Species primo obtutu facillime pro *Arachnio* quodam sumenda, mox tamen cortice tenace gleba grumosa sed non granulosa dignoscenda.

70. Bovista aspera Lév.

Hab. Vulgata in collinis *Lion rang* vocatis prope *Gregory bay*, Apr. 1882.

Obs. Sporae globosae (3-4,5 μ diam.), laeves, grosse 1-guttulatae, non v. vix minutissime papillato-caudatae, tabacino-olivaceae; gleba compactiuscula, gossypina, e fulvo tabacina.

71. Bovista antarctica Speg. (n. sp.).

Diag. Eubovista; subparvula e turbinato globosa (20-25''' diam.), superne convexa laevis, inferne turbinata, coarctata, ruguloso-plicata, basi in radice pro ratione longiuscula crassaque (5-15''' long. × 2-3''' crass.), dura, e fibris mycelialibus terra inmixtis efformata donata, primo alba, dein griseo-murina, atomata; peridium exterius tenue, album, subcarnosum, mox irregulariter minuteque diffractum ac evanescens; interius papyraceo-cartilagineum, tenue, tenacellum, subrigidulum,

murino-griseum v. subsericeo-nitens, superne laxe subminuteque atomatum, inferne minute denseque papilluloso-asperulum (papillis saepius albicantibus) ; gleba peridio adnata, olivaceo-tabacina, gossypino-compactiuscula, e floccis tenuibus (2-4 μ. crass.), laevibus, concoloribus, subcontinuis composita ; sporae globosae (2,5-3,5 μ. diam.), grosse 1-guttulatae, episporio minutissime (subimperspicue) granuloso, caudula papillaeformi vix evoluta donatae, olivaceae.

Hab. Vulgatissima in collinis freti magellanici *Cabo Possession*, *Gregory bay*, *Elisabeth island*, *Punta Arenas*, Aug. 1882.

Obs. Species habitu fere *Lycoperdi* cujusdam ; *Bovistae asperae* Lév. etiam summopere affinis, a qua recedit statura minore, peridio tenuiore, rigidiore, sporis asperulis, colore glebae. An tantum ejusdem varietas?.

72. Bovista pachydermica Speg. (n. sp.).

Diag. Eubovista ; mediocris, globosa v. globoso-depressa (2-4″ diam.), ubique laevis, arrhiza ; peridium exterius primo crassiusculum, carnosulum, album, sursum angulose diffractum, dein tenuissime membranaceo-pelliculosum, sordide albescenti-cinerascens, plus minusve laxe squamuloso-atomatum interiore arcte adnatum evadens; peridium interius subcoriaceum, crassiusculum (0,5-1‴ crass.), tenax, subfragile, diu exteriore tectum, superne subostiolatim stellatim-lacerum ac dehiscens, e murino plumbeum frustulatim evanescens; gleba laxissime floccosa, gossypina, peridio adnata, obscure olivacea, pulvere sporifero repleta, floccis olivaceis, continuis, laevissimis, tenuibus (2-3 μ. crass.) efformata ; sporae globosae (3 μ. diam.), grosse 1-guttulatae, dense majusculeque papilluloso-asperae, obscure olivaceo-fuligineae, caudula hyalina vix evoluta auctae.

Hab. In collinis graminosis parcissime prope *Punta Arenas*, Jul. 1882.

Obs. Species, primo visu, pro *Mycenastro chilense* Mntgn. facillime sumenda, sed mox peridio tenuiore, gleba non pulverulenta et caeteris characteribus dignoscenda.

HYPODERMEAE DBy.

73. Ustilago caricis (Prs.) Fuck.

Hab. In ovariis *Caricis* speciei cujusdam prope *Misioneros* ad *Rio S. Cruz*, Jan. 1882.

Obs. A typo nonnihil recedit. Sori globosi (1,5-2‴ diam.) aterrimi, compactiusculi; sporae angulato-rotundatae v. elongatae e latere compressiusculae (μ 13-15 long. $\times$ 11-14 lat. $\times$ 7-10 crass.), protoplasmate dense granuloso farctae, extus laevissimae, obscure olivaceo-fuligineae.

74. Ustilago segetum (Bull.) Dtm.

Hab. Ad spicas *Polypogonis interrupti* in valleculis uliginosis secus *Rio S. Cruz*, Jan. 1882.

Obs. Sori minuti, atri, compactiusculi; sporae irregulariter angulosae v. subsphaeroideae (5-7 μ diam.), obscure fuligineo-olivaceae, laxe granuloso-farctae extusque minutissime laxeque asperulae! An nova species?.

75. Ustilago pamparum Speg. — Fungi guaran. in obs. ad n. 105.

Hab. Ad spicas *Setariae* cujusdam in pratis secus *Rio Negro*, Aug. 1883.

Obs. Ovaria spicarum tota infecta, hypertrofica, glumis exerta ac duplo longiora, subcylindracea, apice 3 v. 4 laciniato-aperta, involucro membranaceo, crassiusculo, sordide albo v. subroseo donata, intus pulvere aterrimo laxe farcta, ac fibris (columellam fere simulantibus)

instructa; sporae subglobosae (9-11 μ diam.) laeves v. vix granulosae, fuligineo-olivaceae.

76. USTILAGO BROMIVORA F. v. W.
Hab. Ad spiculas vivas *Bromorum* prope *Rio S. Cruz* et *Gregory bay*, aest. et aut. 1882.
Obs. Forma patagonica a typo nonnihil recedit sporis intus non v. subimperspicue granulosis (an minutissime muriculatis?), e globoso angulosis (8-12 × 7-8 μ), opace fuligineis.

77. PHRAGMIDIUM MUCRONATUM (Pers.) Fr. — Sum. Veg. Scand. p. 507.
Hab. Vulgatissimus ad folia *Rosarum* cultarum in *Bahia Blanca*, Jun. 1886.

78. PUCCINIA ARGENTINA Speg. — Fung. Arg. pug. I, n. 32.
Hab. Ad folia viva *Picrosiae longifoliae* secus *Rio Negro*, Sept. 1883.

79. PUCCINIA VIOLARUM Lk. — Sp. II, pag. 80.
Hab. Ad folia viva *Violae magellanicae* in herbosis *Elizabeth island*, Aug. 1882.

80. PUCCINIA PATAGONICA Speg. (n. sp.).
Diag. Sori tumiduli, irregulariter rotundato-elongati (1-5‴ long. × 1-2‴ lat. et crass.), caules, folia nec non inflorescentias ambientes, primo epidermide tecti, dein nudi, compacti, duri (fere sclerotiacei), obscure castanei v. fusco-rubiginosi; teleutosporae obovatae v. subclavatae, medio leniter constrictae, apice versiformes (truncatae, rotundatae v. umbonatae), ac crassissime tunicatae, deorsum cuneatae, basique truncatae (28-35 × 12-15 μ) laeves, pallide fulvae, pedicello hyalino, gracili, mediocri (25-35 × 5 μ) suffultae.
Hab. Ad folia caulosque *Collomiae* cujusdam vulgatissima

secus *Rio S. Cruz* et *Rio Gallego*, Jan et Aug. 1882.
Obs. A *P. giliae* Farl. toto coelo diversa!

81. Puccinia malvacearum Bert.
Hab. Ad folia viva *Modiolae geranifoliae* secus *Rio Negro*, Aug. 1883.

82. Puccinia dichondrae Mntgn.
Hab. Ad folia viva *Dichondrae repentis* prope *Bahia Blanca*, Aug. 1886.

83. Puccinia pampeana Speg. — Fung. Arg. pug. II, pag. 14.
Hab. Ad folia nec non caules vivos *Salpichroae rhomboideae* in pratis prope *Bahia Blanca*, Aug. 1886.

84. Puccinia compositarum Schlecht.
Hab. Ad folia viva *Macrorhynci chilensis* in *Gregory bay*, April. 1882.

85. Uromyces cestri Lév.
Hab. Vulgatus ad folia viva *Cestri Parqui* prope *Bahia Blanca*, Aug. 1886.

86. Uromyces guaycurú Speg. — Fung. Arg. pug. IV, n. 69.
Hab. Ad folia viva *Staticis brasiliensis* prope *Misioneros* ad *Rio S. Cruz*, Jan. 1882.

87. Uromyces geranii Otth. u. Wartm.
Hab. Ad folia viva *Geranii patachonici* in herbosis prope *Salinas* secus *Rio S. Cruz*, Jan. 1882.
Obs. Sori hypophylli, densiuscule sparsi, diu tecti, dein nudi, epidermide fissa cincti, obscure cinnamomei, majusculi (0,3-15‴ diam.); teleutosporae globosae v. plus minusve regulariter obovatae (30-40 $\times$ 25-30 μ), laeves, crassiuscule tunicatae, apice praecipue, pulchre fuligineo-cinnamomeae grosse 1-guttulatae, stipite breviusculo ac crasso (30-35 $\times$ 5-7 μ) hyalino, fultae.

88. Uromyces magellanicus Speg. (n. sp.).

Diag. Sori hypophylli, sparsi v. hinc inde irregulariter subgregarii, non v. rarius seriatim dispositi, non v. subelongati, epidermide laciniata v. suboperculatim disrupta diu ornati, pallide fulvescentes, subminuti (0,3-0,5‴ diam.); teleutosporae globosae, ellipticae v. obovatae (25-30 × 18-22 μ), tunica subtenui, vix antice incrassatula, laevi donatae, pallide fulvescentes, grosse 1-guttulatae, pedicello breviusculo? (an diffluente?) suffultae.

Hab. In foliis vivis *Caricis pallidae*? in herbosis prope *Gregory bay*, Apr. 1882.

89. Uromyces patagonicum Speg. (n. sp.).

Diag. Sori minuti (0,3-0,5‴ diam.), densissime gregarii, subconfluentes, hypophyllum totum (nec non alias partes saepe) pulvere obscure cinnamomea obtegentes; teleutosporae subglobosae v. obovatae (30-35 × 25-28 μ) crasse tunicatae, apice praecipue ibique umbone crasso obtuso (saepeque late truncato) non v. vix pallidiore ornatae, 1-guttulatae, fuligineo-cinnamomeae, stipite (mox diffluente?) hyalino breviusculo fultae.

Hab. Ad folia viva *Astragali* speciei cujusdam in herbosis insulae *Pavon* in *Rio S. Cruz*, Jan. 1882.

90. Uromyces symphiostemi Speg. (n. sp.).

Diag. Sori sparsi v. hinc hinde gregarii, lineares, seriatim dispositi, saepeque confluentes, majusculi (1-5‴ long. × 0,5-1‴ lat.), turgiduli, epidermide vix rimose fissa diu tecti, obscure fuliginei; teleutosporae irregulariter e globoso obovatae (22-26 × 18-20 μ), saepe angulosae, cinnamomeae, tunica tenuiuscula apice non v. incrassata, laevi instructae, antice rotundatae v. obtuse acutatae, basi subcollariato-anulatae (an semper?) ac in stipite breviusculo (12-20 × 5 μ) hyalino, productae.

Hab. Ad folia, vaginas nec non scapos *Symphiostemi narcissoidis* in *meseta* secus *Rio S. Cruz*, Jan. 1882.

91. Uromyces armeriae Lév.
Hab. Ad folia viva *Armeriae andinae* in *Voces bay*, Maj. 1882.
Obs. Sori sparsi minuti, parum perspicui, cinnamomei; teleutosporae globosae v. obovatae, saepe angulosae (28-34 × 22-28 μ), laeves, cinnamomeae, tunica apice summopere incrassata (rarius in umbone producta) instructae; stipite subbrevi (30 × 5 μ), fuscidulo.

92. Uredo pamparum Speg. — Fung. Arg. pug. I, n. 51.
Hab. Ad folia viva *Rhyncosiae sennae* prope *Bahia Blanca*, Aug. 1886.

93. Uredo hydrocotyles Mntgn. -- Gay, Fl. chil., Bot., vol. VIII, p. 50.
Hab. Ad folia viva *Hydrocotylis* speciei cujusdam ad ripas *Rio Negro*, Sept. 1883.

94. Aecidium Euphorbiae Gml.
Hab. Ad folia viva *Euphorbiae portulacoidis* in valleculis uliginosis secus *Rio S. Cruz*, Jan. 1882.
Obs. Pseudosporangia scutellata hypophylla dense gregaria, matrice pallescenti paululo incrassata insidentia; cellulae pseudoperidii irregulariter polygonae (30 × 20 μ), crasse tunicatae, rugosae, hyalinae; sporae globosae v. angulosae (18-20 μ diam.), subcrassiuscule tunicatae, laeves, e flavescenti hyalinae.

95. Aecidium guaycurú Speg. — Fung. Arg. pug. IV, n. 92.
Hab. Ad folia viva nec non caules *Staticis brasiliensis* prope *Misioneros* secus *Rio S. Cruz*, Jan. 1882.

96. Aecidium magellanicum Berk.? — Gay, Fl. Chil. Bot. vol. VIII, p. 38.

Hab. Ad folia viva *Berberidis heterophyllae* prope *Punta Arenas, Gregory bay* et *Rio Gallego,* hieme 1882.

Obs. Specimina senescentia et tandem valde dubiosa.

97. Aecidium berberidis Gml. — Syst. 1473.

Hab. Ad folia viva *Berberidis ilicifoliae* in sylvis prope *Voces bay,* Maj. 1882.

Obs. Cl. Montagne, loco citato, *Berberidi ilicifoliae* tribuit *Aecidium magellanicum;* ego autem, eum numquam inveni nisi in *Berberide heterophylla.*

98. Aecidium obionis Speg. (n. sp.).

Diag. Folia infecta non v. vix incrassatula, pallescentia; pseudosporangia saepius hypophylla (folia tota saepeque ramulos occupantia), densiuscule gregaria, primo tecta, hemisphaerico-prominula, dein erumpentia, plus minusve exerta (0,5‴ × 0,2‴ diam.) flavescenti-albescentia, ore lacero donata; contextus epithecii cellulis anguloso-polygonis (20-25 μ diam.), crassissime tunicatis, dense rugoso-striatis, pallescentibus compositus; sporae e globoso ovoideae, e mutua pressione saepe angulosae (20-22 × 15-18 μ) pallidissime fulvae, tenuissime tunicatae, granuloso-farctae.

Hab. Ad folia viva *Obionis* species adhuc indeterminatae in *Isla de los liones de mar* in *Rio S. Cruz,* Jan. 1882.

99. Aecidium sclerothecium Speg. (n. sp.).

Diag. Pars infecta, incrassata, pallescenti-flavescens; pseudosporangia laxe gregaria, subepidermica, parce prominula, diu clausa, apice tandem lacero-dehiscentia, coriacea, dura, pallide albo-fulvescentia (0,7-1‴ diam.), pulvere rufescente repleta, contextu grosse celluloso, flavescente, parum perspicuo, subopaco; sporae globosae v. e mutua pressione irregulariter obtuseque angu-

losae (25-30 × 20-25 μ), crassiuscule tunicatae, minutissime densissimeque papilluloso-asperulae, e hyalino fulvescentes, granuloso farctae.

Hab. Ad ramulos juniores vivos *Senecionis patagonici* prope *Puerto Deseado*, Nov. 1884.

Obs. Pseudosporangia dura, facillime integra e matrice extrahenda et ovula elliptica (0,7-1,5‴ long. × 0,5-1‴ diam.) laevia pallescentia mentiunt.

100. Aecidium suaedae Speg. (n. sp.).

Diag. Maculae nullae sed folia infecta parum incrassatulo-decolorata; pseudosporangia hinc inde 3-5-aggregata, primo subglobosa, tecto-prominula, dein erumpentia, longe exerta, cylindracea (0,5-1,5‴ long. × 0,4-0,5‴ diam.), non v. vix rigidula, ore frustulatim lacero donata, pallide flavescentia; cellulae contexti irregulariter polygonae v. subrhomboidae (30-40 × 20-30 μ), crasse tunicatae, dense minuteque verruculosae, subhyalinae; sporae globosae v. e mutua pressione ovoideo-angulosae (15-20 μ diam.), episporio tenui, laevi, protoplasmate granuloso farctae, e hyalino flavescentes.

Hab. Ad folia viva *Suaedae divaricatae* in insula *de los leones de mar* in *Rio Santa Cruz*, Jan. 1882.

101. Aecidium modiolae Thüm. — Pilz. aus Entr. n. 2.

Hab. Ad folia viva *Modiolae geranioidis* in uliginosis prope *Bahia Blanca*, Aug. 1886.

PHYCOMYCETEAE DBy.

102. Pilobolus cristallinus Tode.

Hab. Vulgatus ad fimum equinum nec non vaccinum in uliginosis prope *Rio Santa Cruz* et *Gregory bay*, aest. 1882.

103. Mucor mucedo L.
Hab. Ad fructum *Pyri mali* putrescentem in *Cármen de Patagones*, Sept. 1883.

104. Peronospora alsinearum Casp.
Hab. Vulgata ad folia viva *Cerastii vulgati* prope *Punta Arenas*, Apr. 1882.

105. Peronospora effusa (Grev.) Rabh.
Hab. Ad folia viva *Chenopodii muralis* vulgatissima in *Cármen de Patagones*, Sept. 1883.

106. Peronospora parasitica (Pers.) DBy.
Hab. Vulgata ad folia *Senebierae pinnatifidae* et *Nasturtii bonariensis* in paludibus prope *Bahia Blanca*, vere 1886.

107. Cystopus candidus (Pers.) Lév.
Hab. Ad folia *Capsellae bursae-pastoris* (*Nahuel-huapí*, *Santa Cruz*, *Punta Arenas*) et *Raphani sativi* in hortis *Bahia Blanca*, vulgatissima, aestate 1879, 82, 83, 86.

108. Cystopus bliti (Biv.) DBy.
Hab. In folias *Amaranthi chlorostachydis* et *Euxoli viridis* ad viarum latera, *Bahia Blanca*, Aug. 1883.

109. Cystopus portulacae (DC.) DBy.
Hab. Ad folia viva *Portulacae oleraceae* secus *Rio Negro*, aest. 1879.

110. Cystopus argentinus Speg. (n. sp.).
Diag. Acervuli conidici subsuperficiales, tumiduli, parvuli, elliptici (0,3-1‴ diam.), laxe gregarii v. sparsi, diu epidermide tecti, per aetatem laciniatim cincti, albi,

pulverulenti; conidia catenulata, globosa v. obscure subcuboidea (18-20 μ diam.), tenui tunicata, laevia, hyalina, granuloso-farcta. Oosporae in parenchymate foliorum immersae, globosae (50-65 μ diam.), subopace fuligineae, laevissimae, protoplasmate hyalino granuloso farctae, oogonio hyalino monosporo inclusae.

Hab. Ad folia nec non caules vivos *Spergulariae grandis* in uliginosis prope *Bahia Blanca,* Aug. 1886.

Obs. Conidia et oogonia eodem tempore ac in eodem folio vigentes. Fungillus oogonicus folio luci objecto, ut macula opaca tantum conspici potest.

PYRENOMYCETEAE Fr.

111. Phyllactinia antarctica Speg. (n. sp.).

Diag. Perithecia hypophylla, sparsa, mycelio, oidiaceo albo parcissimo mox evanido insidentia, globosa, (130-140 μ diam.), atra, verruculoso-asperula, opaca, glabra, sicca non v. vix cupulata, superne 6-8 appendicibus subcoronata; appendices simplices, cylindraceae (150-200 × 9 μ), rectae, divaricatae, apice obtuse acutatae, basi vesciculoso-inflatae (40 × 30 μ), hyalinae, continuae, laevissimae. Asci 8 v. 10 in quoque perithecio cylindraceo-elliptici v. subovati, apice late subtruncati, basi crasse brevissimeque noduloso-stipitati (80-95 × 22-24 μ), aparaphysati, bispori (an quandoque tetraspori?); sporae ellipticae v. ovoideae (32-33 × 15-20 μ), utrinque obtuse rotundatae, continuae, laeves non v. grosse 1-guttulatae, hyalinae.

Hab. Ad folia viva *Ribis magellanici* in colliuis *Lion rang* prope *Gregory bay,* 20 April. 1882.

112. Phyllactinia suffulta (Reb.) Sacc.

Hab. Ad folia viva *Anarthrophylli rigidi* prope *Misioneros* secus *Rio Santa Cruz,* Jan. 1882.

Obs. Perithecia amphigena, sparsa, mycelio oidiaceo albo, parco subpersistente insidentia, globoso-depressa (200-220 μ diam.), atra, opaca, glabra, sicca cupulato-collapsa, inferne 6-8-appendiculata; appendices simplices attenuato-cylindraceae (150-250 × 7-9 μ), divaricatae, apice obtuse acutatae, basi vesciculoso-inflatae (28-30 × 20-25 μ). Asci 4 v. 5 in quoque perithecio, elliptico-sublimoniformes, sursum subumbonati, crasse rotundato-acutati, deorsum brevissime pedicellati (54-55 × 30 μ), aparaphysati, bispori; sporae ovoideae, utrinque obtusae (28 × 12-14 μ), granuloso-farctae, hyalinae.

113. Meliola megalospora Speg. — Fung. Arg. pug. IV, n. 115.

Hab. Ad folia viva *Iodinae rhombifoliae* in dumetis prope *Bahia Blanca*, Aug. 1886.

114. Valsa Bovei Speg. (n. sp.).

Diag. Euvalsa; acervuli laxe gregarii, cortice innati, e lenticulari conoidei (1-1,5‴), peridermio sublevato tecti, 12-15-peritheciigeri, disco majusculo parum erumpenti-exerto donati, stromate subfriabili albicante, peritheciis atris; perithecia globosa (250-300 μ), stromate immersa, dense constipata, coriacella, atra, submembranacea, ostiolis longiusculis, fasciculatim conniventibus, cylindraceis, atris, subcarbonaceis, apice obtusis (400-500 × 80-120 μ), discum efformantibus ornata; asci clavulati v. fusoidei, sessiles, antice obtuse rotundati v. subtruncati (38-40 × 5-6 μ), basi attenuato-obtusati, octospori, aparaphysati; sporae recte v. oblique distichae, botuliformes, utrinque obtuse rotundatae (8-10 × 2 μ), hyalinae.

Hab. In ramis emortuis *Genistae*? species indeterminatae prope *Misioneros* secus *Rio S. Cruz*, Jan. 82.

115. EUTYPA PATAGONICA Speg. (n. sp.).

Diag. Stromate effuso, inaequali, vix tumidulo, sub peridermio evoluto eoque arcte adnato, nigricante v. fuscescente, per lignum obsolete excurrente; peritheciis hinc inde 6-20 dense constipatis, majusculis (0,5‴ diam.), globosis v. e mutua pressione angulosis, atris, laevibus, in collis longitudine variis productis; collis hinc inde fasciculatis ac epidermidem tumefactam perforantibus, non v. vix exertis, atris, ostiolis compressiusculis subconnatis non v. vix rugosis ac sulcatis donatis; ascis clavatis, longissime pedicellatis (part. sp. 40 × 6-7 μ = ped. 50-70 × 2 μ), apice attenuato-truncatis, crassissime tunicatis perforatisque, octosporis, paraphysibus filiformibus guttulatis, simplicibus, parcis obvallatis; sporis cylindraceo-allantoideis (10-13 × 2-2,5 μ) utrinque obtuse rotundatis ac 1-guttulatis, continuis, chlorinis.

Hab. Ad ramos emortuos putrescentes *Chiliotrichi amelloidis* vulgatissima in *Rio Gallego, Gregory bay, Punta Arenas*, aest. et hiem. 1882.

Obs. Species notis perplurimis *Eut. ludibunda* Sacc. accedens et facile ut ejusdem forma tantum consideranda.

116. EUTIPA HETERACANTHA Sacc.

Hab. Ad sarmenta dejecta *Vitis viniferae* prope *Cármen de Patagones,* Sept. 1883.

117. EUTYPA COMOSA Speg. — Fung. Arg. pug. IV, n. 121.

Hab. Ad ramos dejectos putrescentes *Celtidis talae* prope *Bahía Blanca,* Aug. 1886.

118. HYPOCOPRA DARWINII Speg. (n. sp.).

Diag. Perithecia sparsa, minuta ex ovato globosa (250-300 μ), nuda, glabra, laevia, ostiolo vix prominulo

obtuso donata, membranacea, contextu parenchymatico-subindistincto, pellucido, fuligineo; asci cylindracei (80-90 × 8-9 μ), apice obtuse rotundati v. subtruncati, subbifoveolati, deorsum breviter attenuato-pedicellati, octospori, paraphysibus parcis filiformibus, simplicibus, immixti; sporae recte v. oblique monostichae discoideo-v. subelliptico-lenticulares (μ 8-10 long. × 7-9 lat. × 4-4,5 crass.), eguttulatae, laevissimae, fuligineae, tunica mucosa destitutae.

Hab. In fimo struthionum (*Rheae Darwinii*) putrescente in *Meseta* secus *Rio Santa Cruz*, Jan. 1882.

Obs. Specimina nonnulla etiam inveni in fimo equino prope *Punta Arenas* et vix differunt ascis paullulo longioribus praecipue in parte stipitali (μ 110-120 long. tot. × 10 crass. = prt. stip. 70-80 long.).

Hypocopra discospora (Awd.) Fuck. summopere affinis, vero tamen satis distincta.

119. Hypocopra patagonica Speg. (n. sp.).

Diag. Perithecia minuta subpyriformia (180-200 μ diam.) superficialia v. semiimmersa, laevia, vix circa ostiolum crasse umbonatum minutissime ruguloso-papillulosa, membranacea, contextu grosse parenchymatico-celluloso, pellucido, olivaceo; asci cylindracei, apice truncato-rotundati, tunica modice incrassata, deorsum in stipite mox fluxili ac evanescente attenuato-producti (p. sp. 130 × 10-15 μ), octospori, paraphysibus filiformibus, subfluxilibus, simplicibus, densiusculis obvallati; sporae recte v. oblique monostichae, ellipticae v. ovoideae (15-18 × 8 μ), utrinque obtusae, laeves, eguttulatae opace fuligineae, muco destitutae.

Hab. In fimo equino prope *Misioneros* secus *Rio Santa Cruz*, Jan. 82.

Obs. Species *H. fimicolae* (Rob.) Sacc. nec non *H. argen-*

tinae (Speg.) Sacc. affinis, ab utraque sporis ascisque gracilioribus praecipue recedens.

120. Hypocopra hornithophila Speg. (n. sp.).

Diag. Perithecia sparsa, minuta, globosa (258-300 μ diam.) matrici immersa, ostiolo atro superficiem matricis attingente v. vix exerto, subcarbonaceo, udo papillulato, sicco cupulato-collapso donata, grisea, sordide pruinulosa, carnosulo-membranacea, contextu subindistincto, pallide fulvo-olivascente; asci cylindracei apice truncato-rotundati, ac tunica crassiuscula, tri-foveolata donati, basi in stipite attenuato-producti (long. tot. 140-150 = p. sp. 130 × 12-14 = ped. 20-25 μ), paraphysibus filiformibus, toruloso-guttulatis, apice saepe ramulosis parce obvallati, octospori. Sporae ellipticae v. elliptico-ovoideae (22-24 × 11-12 μ), utrinque obtusiusculae, eguttulatae, laevissimae, primo tunica mucosa, crassa, hyalina involutae dein nudae.

Hab. In stercore vetusto *Berniclae antarcticae* in marittimis prope *Punta Arenas*, Jul. 1882.

Obs. Ab *H. aviaria* Karst. longe abhorrens.

121. Coprolepa equorum Fuck. — Sacc., Syll. Fung. vol. I, p. 249.

Hab. In fimo equino vetusto vulgata prope *Rio S. Cruz*, *Rio Gallegos* nec non prope *P. Arenas,* aest. et aut. 82.

Obs. Sporae ellipticae v. subovatae, utrinque acutiuscule rotundatae (25 × 9-10 μ), tunica mucosa, hyalina, inaequilaterali involutae.

122. Rosellinia magellanica Speg. (n. sp.).

Diag. Perithecia, in ligno denudato, dense seriata v. subbotryose aggregata, saepe subconfluentia, minuta, globosa v. obovata (200-300 μ diam), ostiolo minuto papil-

lulato donata, dura, carbonacea, atra, laevia, glabra, contextu indistincto; asci cylindracei, apice truncato-rotundati ac tunica non v. vix incrassatula saepeque biguttulata donati, basi breviter attenuato-pedicellati (95-110 × 9-11 μ), octospori, paraphysibus parcis, filiformibus, simplicibus immixti; sporae recte v. oblique monostichae, elliptico-lenticulares (18-20 long. × 8-10 lat. × 4-6 μ crass.), e fronte utrinque obtusae, e latere acutiuscule rotundatae, opace fuligineae, non v. grosse 1-guttulatae, opace fuligineae.

Hab. Ad ramos dejectos putrescentes *Fagi antarcticae* et *Mayteni chilensis* in sylvis prope *Cabo Negro*, Jul. 1882.

123. Hypoxylon magellanicum Speg. (n. sp.).

Diag. Perithecia majuscula (1-1,5‴ diam.), globoso-depressa, superne convexo-applanata centro ostiolato-papillulata, basi matrici parum infossa, stromate parcissimo interjuncta, pauci-aggregata, atra, dura, fragilia, glabra, laevissima; asci cylindracei, apice obtusissime rotundati v. subtruncati, inferne longiuscule attenuato-pedicellati (p. sp. 100-110 × 10 — stip. 80-130 × 5 μ), octospori, paraphysibus filiformibus densis crassis guttulatis obvallati; sporae oblique monostichae, elliptico-naviculares (15-17 × 8-9 μ), utrinque acute rotundatae, non v. 1-2-grosse guttulatae, opace fuligineae, strato mucoso hyalino exiguo obovolutae.

Hab. Ad ligna cariosa mucida *Fagi antarcticae* in sylvis prope *Punta Arenas*, Apr. 1882.

Obs. Species *H. semiimmerso* Ntsk. peraffinis; pulvinuli saepius 4-7-peritheciigeri sed quandoque (rarissime) perithecia solitaria sparsa etiam occurrunt.

124. Sphaerella patagonica Speg. (n. sp.).

Diag. Maculae nullae sed totum folium ex albo griseo-

arescens; perithecia sparsa v. hinc inde laxe aggregata, subepidermica, minuta, lenticulari-globosa (70–90 μ. diam.), tenuissime membranacea, grosse parenchymatico-cellulosa, ostiolo rotundo perforata; asci e globoso-ovati, apice subacutato-rotundati crassissimeque tunicati, basi stipite crasso brevissimo (vix evoluto) suffulti (20 × 16 μ.), octospori, aparaphysati; sporae inordinate polystichae, elliptico-clavulatae, utrinque obtusiuscule rotundatae (8-9 × 2-3 μ.), medio 1-septatae, non v. vix subconstrictae, loculo supero nonnihil crassiore breviореque, hyalinae.

Hab. Ad folia exsiccata emarcida *Bolacis glebariae* in *Gregory bay*, Apr. 1882.

125. Sphaerella magellanica Speg. (n. sp.).

Diag. Maculae nullae sed matrix tota sordide griseo-arescens; perithecia hinc inde sparsa, subepidermica, globuloso-lenticularia (120-130 μ. diam.), prominula, atra, glabra, ostiolo rotundo donata, membranacea, contextu parenchymatico, minute celluloso, atro-fuligineo; asci cylindracei v. cylindraceo-obclavati, subpachydermatici, apice subtruncato-rotundati, basi abrupte in stipite brevissimo nodulosoque producti (48-55 × 10-15 μ.), octospori, aparaphysati; sporae recte di-tri-stichae, elliptico-clavulatae, utrinque plus minusve obtuse rotundatae (15-17 × 5-6 μ.), medio 1-septatae, leniterque constrictae, loculo supero nonnihil crassiore, breviore acutioreque, hyalinae.

Hab. In scapis dejectis putrescentibus *Armeriae andinae* prope *Gregory bay*, Apr. 1882.

126. Melanopsamma ? lophiostomoides Speg. (n. sp.).

Diag. Perithecia sparsa v. laxe gregaria subseriata, matrice totaliter immersa, globoso-ovoidea (300-350 μ. diam.), atra, carbonacea, ostiolo papillulato tantum ma-

tricis superficiem attingente non v. vix exerto, rotundo v. compressiusculo, rimose dehiscente (an semper?) donata; asci cylindracei, apice obtuse rotundati crasseque tunicati, basi in stipite breviusculo noduloso attenuato-producti (130-140 × 13-14 μ), octospori, paraphysibus densissimis filiformibus obvallati; sporae oblique monostichae, fusoideo-ellipticae (24-26 × 7-8 μ), medio 1-constricto-septatae, primo loculis grosse 2-3-nucleatis ac bis coarctatis (an tetrablastes?), dein simplicibus, laevibus, utrinque obtusiusculae, minute subimperspicueque apiculatae, strato mucoso tenuissimo obvolutae, hyalinae v. fumosae.

Hab. In trunco decorticato fluitato secus *Rio Gallegos* in loco *Kilik-aiken* vocato, Aug. 1882.

Obs. Species ad *Lophiostomata* nonnihil vergens, notis tamen fructificationis *M. europaea* Sp. peraffinis.

127. Gnomonia magellanica Speg. (n. sp.).

Diag. Maculae nullae; perithecia parenchymate innata, tecta, amphigena, sparsa, minuta, globosa (200-250 μ diam.), glabra, ostiolo setiformi longiusculo exerto, elongatulo, laeve, concolore donata. Asci et sporae ignoti.

Hab. Ad folia dejecta putrescentia *Fagi antarcticae* in sylvis *Voces bay*, Maj. 1882.

128. Melanconis antarctica Speg. (n. sp.).

Diag. Stroma valseum, ellipticum (5-6‴ lat. maj. × 2-3‴ lat. min. × 0,3-0,5‴ crass.), disco excepto, peridermio tectum, substantia corticis fere immutata efformatum, in parte centrali albescenti-flavescens, vix protuberans; perithecia in singulo stromate 15-25, eoque immersa, circinantia, sphaeroidea (250-300 μ diam.), atra, glabra, laevia, ostiolis in disco corticem perforante sed vix prominulo exertis, conoideis, obtusiusculis, rigidulis, ni-

gris, constipatis, subconfluentibus donata; asci cylindraceo-subclavati, superne rotundato-subtruncati, minute bifoveolati, inferne in pedicello mox fluxili producti (p. sp. 80-85 × 10-11 μ), octospori, aparaphysati?; sporae hyalinae v. fumosae distichae elongato-ellipticae v. subfusoideo-ellipticae (25-26 × 5 μ), medio 1-septatae leniterque constrictae, non v. vix subinaequilaterales, utrinque obtusiuscule acutatae ac caudula gracili subflexuosa (20-25 × 1-1,5 μ) hyalina auctae.

Hab. Ad ramos emortuos *Fagi betuloidis* in sylvis prope *Punta Arenas,* Apr. 1882.

Obs. Species *M. alni* Tul. valde affinis sed certe diversa!

129. Diaporte magellanica Speg. (n. sp.).

Diag. Tetrastaga; stroma effusum, obsoletum, corticis interioris et ligni superficiem nigrificans; perithecia laxe gregaria v. sparsa, cortice nidulantia, vix tumidula, lenticulari-globosa (300-400 μ diam.), ostiolis brevissimis, subconoideis epidermidem perforantibus sed vix exertis donata; asci fusoidei (55-60 × 5-6 μ), apice subtruncati, inferne acutati, aparaphysati, octospori; sporae distichae, elliptico-elongatae (10-14 × 2,5-3 μ), utrinque obtusiusculae, subinaequilaterales medio 1-septato-constrictae, grosse 1-guttulatae, hyalinae.

Hab. Ad ramos emortuos *Ribis magellanici* prope *Cabo Negro,* Jun. 1882.

Obs. Species *D. mitis* Sacc. peraffinis, sporis tamen minoribus obtusioribusque recedens; an tantum ejusdem varietas?.

130. Delitschia patagonica Speg. (n. sp.).

Diag. Perithecia sparsa, immersa, globosa (0,5-0,7‴ diam.), glabra, laevia, ostiolo papillulato-obtuso, atro, subcarbonaceo, superficiem matricis attingente v. vix exerto

donata, atra crassiuscule membranacea, contextu indistincto, fuligineo, opaco ; asci cylindracei sursum obtuse rotundati, deorsum abrupte, breve noduloseque stipitati (200 × 20 μ), paraphysibus crassiusculis guttulatis simplicibus parcis obvallati, octospori ; sporae oblique monostichae, ellipticae (35 × 16 μ) utrinque obtuse rotundatae, medio uniseptatae et leniter constrictae, non v. vix subinaequilaterales, opace fuligineae, tunica mucosa, hyalina, tenui obvolutae.

Hab. In fimo *Aucheniae guanaco* prope *Mount Entrance* ad ostia *Rio S. Cruz*, Jan. 1882.

131. Sphaerulina giliae Speg. (n. sp.).

Diag. Perithecia in matrice arescente albo-grisea sparsa, primo epidermide tecta dein nuda, lenticularia (120-150 μ diam.), atra, laevia, glabra, apice ostiolato-perforata, membranaceo-coriacella, contextu grosse celluloso-parenchymatico, fuligineo ; asci cylindracei v. cylindraceo-clavati, antice obtuse rotundati, postice in stipite brevissimo, crassiusculo, noduloso producti (40-50 × 6-7 μ), octospori, aparaphysati ; sporae recte distichae, fusoideae, utrinque acutiusculae, medio 1-septatae leniterque constrictae, loculis medio septatis, supero nonnihil breviore acutioreque utrinque acutiusculae (13-14 × 3 μ), hyalinae.

Hab. Ad caules, folia, capsulas exsiccata putrescentia *Giliae arcuatae* in *Gregory bay, Rio Gallego, Rio S. Cruz*, vulgatissima aest. et aut. 1882.

Obs. Species facillime generi *Metasphaeriae* adscribenda.

132. Metasphaeria ? macrospora Speg. (n. sp.).

Diag. Perithecia in matrice arescenti-dealbata sparsa, parenchymate immersa, ostiolo papillulato tantum superficiem attingente non. v. vix exserto donata, globosa (200-250 μ diam.), atra, glabra, laevia, crassiuscule

membranacea, contextu parenchymatico celluloso, fuligineo-atro; asci pauci in quoque perithecio, saccati v. ovati, antice obtuse rotundati crasseque tunicati, postice pedicello brevissimo noduloso donati (80-95 × 30-40 μ), octospori aparaphysati; sporae inordinate distichae, fusoideo-ellipticae (38-42 × 12-13 μ), utrinque obtusiusculae, subcurvulae 7-septatae ac constrictae, loculis dense guttulatis, quarto supero caeteris nonnihil crassiore, primo hyalinae ac tunica mucosa crassiuscula concolore vestitae, dein nudae dilute fumoso-chlorinae.

Hab. Ad folia viva *Azorellae trifurcatae* in aridis marittimis, *Gregory bay*, Apr. 1882.

Obs. Species pulcherrima notis nonnullis ad *Pleosporam* vergens, dubia etiam inter *Leptosphaeriam* et *Sphaerulinam* nutat!.

133. Acanthostigma? imperspicuum Speg. (n. sp.).

Diag. Perithecia in superficie denudata sparsa v. laxissime gregaria, minutissima (150-180 μ diam.), e lenticulari-conoidea, saepe e latere compressiuscula, basi matrici insculpta, subcarbonacea, atra, minute laxeque hirsuta, setulis pusillis (18-30 × 2-3 μ), atris, opacis, contextu indistincto, ostiolo minutissimo pertusa: asci obclavati v. subovato-elliptici, antice rotundato-obtusati, postice abrupte in stipite brevi nodulosoque contracti (25-30 × 10-12 μ), aparaphysati, octospori; sporae recte v. oblique di-tri-stichae, elliptico-fusoideae, utrinque acutiusculae (9-11 × 3-3,5 μ), triseptatae, ad septum medium non v. vix constrictae, loculis duobus centralibus fumosis.

Hab. Ad ramos emortuos decorticatos *Fagi antarcticae* prope *Cabo Negro,* Jun. 1886.

Obs. An melius generi *Chaetosphaeriae* adscribenda?.

134. Zignoella patagonica Speg. (n. sp.).

Diag. Maculae indeterminatae, albae magnitudine ludentes; perithecia hinc inde laxiuscule 3-10-aggregata, macularum centro insidentia, ex ovoideo conoidea (200-250 μ diam.) carbonacea, atra, opaca, glabra, apice ostiolo submajusculo perforata; asci cylindraceo-subfusoidei, apice truncato-rotundati, basi in stipite breviusculo attenuato-producti (90-110 × 9-12 μ) octospori, paraphysibus filiformibus simplicibus obvallati; sporae distichae, subfusoideae, utrinque acutiusculae (16-20 × 5-6 μ) subinaequilaterales, 3-septatae, ad septum medium non v. vix constrictae, hyalinae.

Hab. Ad truncum denudatum vetustum *Fagi antarcticae* in sylvis prope *Punta Arenas*, Jul. 1882.

Obs. Species plurimis characteribus *lichenibus* accedens, iodi ope tamen nulla.

135. Sporormia minima Awd. — Sacc., Syll. Fung. vol. II., p. 124.

Hab. In stercore struthionum (*Rheae Darwinii*) et *Caviae australis* prope *Misioneros* secus *Rio S. Cruz*, Aug. 1882.

Obs. Asci cylindraceo-obclavati, apice subtruncato-rotundati crasseque tunicati, postice brevissime abrupteque noduloso-stipitati (70-80 × 13-15 μ), octospori, paraphysibus nullis v. paucissimis filiformibus simplicibus immixti; sporae recte v. oblique polystichae, cylindraceae, non v. vix curvulae (30-32 × 5-5,5 μ), tetramerae, strato mucoso hyalino tenuissimo v. nullo donatae.

136. Sporormia ambigua Niessl. — Sacc., Syll. Fung. vol. II., p. 125.

Hab. In fimo *Caviae australis* secus *Rio S. Cruz*, Aug. 1882.

Obs. Perithecia sparsa, immersa v. semmiimmersa, subglobosa (200-250 μ), atra, subcarbonaceo-membranacea,

contextu parenchymatico subindistincto, atro, opaco, glabra, vix basi hyphis paucis brevibus repentibus ornata, ostiolo mammillato obtuso coronata; asci cylindraceo-subfusoidei (130-140 × 10-12 μ), apice subtruncato-rotundati, inferne in stipite (20-25 μ long.) producti, octospori, paraphysibus densis quandoque filiformibus, quandoque torulosis obvallati; sporae cylindraceae non v. vix subclavulatae (35-40 × 6-6,5 μ), tetramerae, strato mucoso hyalino tenui obvolutae, opace fuligineae, loculis eguttulatis.

A typo vix recedit sporis et ascis gracilioribus.

137. Sporormia lagenaeformis Fuck. — Sacc., Syll. Fung. vol. II, p. 125.

Hab. In stercore *Rheae Darwinii* prope *Mount Entrance* ad ostia fluminis *Rio S. Cruz*, Aug. 1882.

Obs. Perithecia conoideo-globosa (!), parvula (200-250 μ diam.), glabra, atra, membranacea, contextu indistincte parenchymatico; asci cylindraceo-clavati, antice subtruncato-rotundati, deorsum modice attenuato-pedicellati (80-100 × 20 μ) aparaphysati, octospori; sporae di-polystichae, cylindraceae (34-36 × 8 μ), fuligineae, non v. vix curvulae, opace fuligineae muco destitutae. A typo recedit forma peritheciorum nec non ascis nonnihil brevioribus.

138. Sporormia obliquisepta Speg. (n. sp.).

Diag. Perithecia sparsa lenticulari-globosa (200-250 μ diam.), ostiolo minuto papillulato instructo, atra, glabra, membranacea, contextu atro-fuligineo; asci clavati, antice rotundati crasseque tunicati, postice in stipite modice attenuati (115-130 × 15-16 μ), paraphysibus densis filiformibus, rarius torulosis obvallati, octospori; sporae cylindraceae, leniter curvulae (40 × 7 μ), tetramerae, loculis subrhomboideis (ob septa obliqua), primo

strato mucoso hyalino vestitae, dein nudae mox in articulis secedentes.

Hab. In fimo equino vetusto in valleculis uliginosis prope *Misioneros* secus *Rio S. Cruz*, Aug. 1882.

Obs. Species plurimis affinis, sed septis obliquis, loculisque rhomboedricis mox dignoscenda !

139. SPORORMIA INTERMEDIA Awd. — Sacc., Syll. Fung. vol. II, p. 126.

Hab. In fimo *ovium* et *struthionum* vetusto in insula *Pavon* fluminis *Rio S. Cruz*, Apr. 1882.

Obs. Perithecia e globoso-depressa (250-300 μ diam.), ostiolo crassiusculo papillulato instructa, nigra, glabra, membranacea, contextu parenchymatico-sinuoso, subindistincto, atro, fuligineo, pellucido; asci cylindracei, antice obtusissime rotundati crassiusculeque tunicati, postice breviuscule stipitati (150-160 × 20 μ), paraphysibus filiformibus parcis obvallati, octospori; sporae cylindraceae (42-50 × 8 μ), utrinque obtusiusculae, tetramerae, opace fuligineae, primo strato mucoso mox evanescente obovolutae.

140. SPORORMIA PATAGONICA Speg. (n. sp.).

Diag. Perithecia sparsa, subsuperficialia, subglobosa (200-250 μ diam.), in sicco subcupulato-collapsa, ostiolo minuto vix papillulato donata, membranacea, contextu parenchymatico polyedrico atro-fuligineo; asci cylindraceo subclavati, antice rotundati, tunica non v. vix incrassata, postice in stipite brevi ac crassiusculo cuneato-attenuati (95-110 × 20 μ), aparaphysati, octospori; sporae recte v. oblique distichae, cylindraceae non v. vix curvulae, utrinque acutiuscule obtusatae (35-39 × 6-7,5 μ), facillime in articulis (centralibus 11-12 μ long.) secedentes, strato mucoso destitutae, opace fuligineae.

Hab. In fimo vetusto putrescente *Aucheniae guanaco* nec non *Rheae Darwinii* prope *Mount Entrance* ad ostia *Rio S. Cruz*, Jan. 1882.

141. Sporormia australis Speg. (n. sp.).

Diag. Perithecia minuta e globoso conoidea (150-180 μ. diam.), sparsa, semmiimmersa, atra, glabra, ostiolo vix acutato et perspicuo coronata; asci cylindracei v. cylindraceo-obclavati, (75-80 × 20 μ), antice obtussissime rotundati crassiusculeque tunicati, postice abrupte in stipite brevissimo ac noduloso producti, paraphysibus paucis, filiformibus, valde brevioribus obvallati, octospori; sporae cylindraceae (40-42 × 8 μ), utrinque obtusiusculae, tetramerae, loculis (centralibus sphaeroideo-cuboideis) ocellatis, strato mucoso crassissimo hyalino obovolutae.

Hab. In fimo *Caviae australis* prope *Misioneros* secus *Rio S. Cruz*, Aug. 1882.

142. Sporormia megalospora Awd. — Sacc., Syll. Fung. vol. II, p. 126.

Hab. In stercore *Rheae Darwinii* in altiplanitie *meseta* vocata secus *Rio S. Cruz*, Jan. 1882.

Obs. Perithecia sparsa, subsuperficialia, globulosa (400-500 μ. diam.), sicca cupulato-collapsa, atra, glabra, laevia, membranacea, ostiolo papillulato, parum perspicuo, contextu indistincto, opaco; asci cylindraceo–clavati, apice obtuse truncati, basi in pedicello modice elongato attenuati (150-180 × 32-35 μ) octospori, paraphysibus filiformibus, densissimis, submucoso–coalescentibus, hyalinis obvallati; sporae cylindraceae utrinque acutiuscule rotundatae (80 × 10-11 μ), vix curvulae, tetramerae, opace fuligineae, strato mucoso hyalino crasso (5-6 μ. crass.) obovolutae, atro-fuligineae.

143. Sporormia heptamera Awd. — Sacc., Syll. vol. II, p. 129.

Hab. In fimo equino vetusto prope *Punta Arenas*, Jun. 1882.

Obs. Perithecia e conoideo globosa (250-300 μ diam.), ostiolo vix papillulato, glabra, atra, membranacea, contextu pellucido, parenchymatico, fuligineo-atro; asci fusoideo-subclavati (180-200 × 30 μ), antice rotundato-subtruncati crassiusculeque tunicati, postice breviuscule crassiusculeque stipitati paraphysibus paucis, filiformibus, simplicibus immixti, octospori; sporae cylindraceo-fusoideae, utrinque acutiuscule rotundatae (60-80 × 13-14 μ), heptamerae, loculo quarto supero aliis nonnihil crassiore, opace fuligineae, strato mucoso hyalino crasso obovolutae.

144. Pleospora gallegensis Speg. (n. sp.).

Diag. Perithecia in matrice canescenti-arescente sparsa, parenchymate innata, subepidermica, lenticulari-convexa (180-200 μ diam.), ostiolo papillulato epidermidem perforante non v. vix prominulo donata, atra, glabra, coriaceo-membranacea, contextu dense parenchymatico, fuligineo-atro; asci mox diffluentes, non visi; sporae ellipticae v. ovoideae inferne acutiusculae superne obtusiusculae (16-20 × 8-9 μ), 4-septatae, ad septa constrictiusculae, loculis centralibus septo altero longitudinali percursis, dilute fusco-brunneae.

Hab. Ad folia dejecta putrescentia *Stipae* cujusdam secus *Rio Gallego*, Aug. 1882.

145. Pleospora patagonica Speg. (n. sp.).

Diag. Perithecia sparsa, matricis subimmutatae parenchymate innata, lenticulari-hemisphaerica (200-250 μ diam.) ostiolo rotundo minutissimo perforata, atra, glabra, laevia, carbonaceo-membranacea, contextu indistincto; asci

cylindraceo-saccati, apice subtruncato-rotundati crasseque tunicati, basi abrupte in pedicello brevissimo crassoque producti (65-70 × 25-30 μ), aparaphysati, octospori; sporae recte di-v. tri-stichae, elliptico-ovoideae (24-28 × 10 μ), non v. vix subinaequilaterales, utrinque obtusiuscule acutatae, horizontaliter 7-septatae, septis 3 verticalibus percursae, ad septum medium constrictae, primo hyalinae, dein pallide chlorino-flavescentes.

Hab. Ad culmos dejectos putrescentes *Stipae* cujusdam secus *Rio Gallego*, Aug. 1882.

146. Pleospora magellanica Speg. (n. sp.).

Diag. Perithecia sparsa v. laxe gregaria, immersa, ostiolo papillulato tantum matricis superficiem attingente non v. vix exerto donata, globosa (200-230 μ diam.), atra, glabra, subrugulosa, subcarbonaceo-membranacea, contextu parenchymatico, subopaco, atro; asci cylindracei, pachydermatici, antice obtuse rotundati, postice abrupte in pedicello brevissimo crassoque desinentes (80-95 × 20 μ), aparaphysati, octospori; sporae recte distichae v. oblique monostichae, elliptico-obovatae (25-28 × 10-14 μ), non v. vix subinaequilaterales, medio 1-septatae non v. vix constrictae, loculo superiore 3-horizontaliter, 2-verticaliter septato (septis alternis), infero acutiore saepius 2-horizontaliter et 1-verticaliter septato, primo flavae, dein opace fuligineae.

Hab. Ad folia emortua *Azorellae trifurcatae* in *Gregory bay*, Apr. 1882.

147. Pleospora freticola Speg. (n. sp.).

Diag. Perithecia sparsa, epidermide tecta, prominula e conoideo globosa (250-300 μ diam.), atra, laevia, glabra, dura, ostiolo papillulato pertusa, subcarbonacea, contextu parenchymatico, subindistincto, opaco, atro; asci cylindraceo-subclavati, pachydermatici, sursum obtuse

rotundati, deorsum modice attenuato-stipitati (105-130 × 20–23 μ), paraphysibus parcis, crassis, fluxilibus obvallati, octospori; sporae recte distichae, elliptico-obovatae, utrinque obtusae (27-30 × 10-11 μ), medio 1-septatae, non v. vix constrictae, loculis 3-horizontaliter 1-2-verticaliter septatis, primo flavidae, dein olivaceae ac vix pellucidae.

Hab. Ad scapos dejectos putrescentes *Armeriae andinae* in *Gregory bay*, Apr. 1882.

Obs. In ascis sporas murales gerentes adsunt etiam saepe sporae nonnullae biloculares tantum, obscure fuligineae eadem magnitudine!

148. Pyrenophora antarctica Speg. (n. sp.).

Diag. Perithecia sparsa e conoideo globosa (250-300 μ diam.) superne tantum matrice exerta, atra, ostiolo vix papillulato laxe minuteque penicillato-setuloso (setulis conico-cylindraceis (40 × 3 μ), atris, opacis coronata, caeterum glabra, laevia, subcarbonacea, contextu opaco indistincto; asci cylindraceo-subclavati, apice subtruncato-rotundati crasseque tunicati, basi in stipite brevi crassiusculoque producti (70-75 × 9-10 μ), octospori, paraphysibus paucis, crassiusculis, guttulatis obvallati; sporae recte distichae, elliptico-subclavulatae, saepius nonnihil inaequilaterales (14-16 × 5-6 μ), medio 1-septato-constrictae, loculo supero crassiore obtusioreque 1-rarius 2-horizontaliter et 1-verticaliter septato, infero acutiusculo graciliore 2-horizontaliter, non v. 2-verticaliter septato donatae, primo flavidae, dein obscure fuligineae.

Hab. Ad folia emortua putrescentia *Azorellae* cujusdam in *Gregory bay*, Jun. 1882.

149. Pleosphaeria patagonica Speg. (n. sp.).

Diag. Perithecia in ligno denudato v. cortice libero

adhuc tecto, sparsa v. subseriatim hinc inde pauci-gregaria, globosa v. globoso-depressa (120–150 μ diam.), ostiolo non v. vix papillulato et perspicuo ornata, atra, submembranaceo-carbonacea, contextu indistincto, atro-fuligineo, setulis conico-cylindraceis, minutis (15-50 × 2-5 μ), atro-fuligineis, opacis, rigidulis laxe vestita; asci fusoideo cylindracei, sursum subattenuati crassissimeque tunicati (ac steriles), apiceque truncato-rotundati, deorsum in stipite brevissimo crasso nodulosoque attenuato-producti (50-55 × 12–14 μ), aparaphysati, octospori; sporae recte v. oblique distichae, elliptico-subfusoideae, utrinque obtusiuscule rotundatae (16-18 × 6-6,5 μ), 3-5-septato-constrictae, loculis 1-3 centralibus septo altero longitudinali donatis, griseo-fumosae.

Hab. Ad ramos dejectos putrescentes *Fagi antarcticae* in sylvis prope *Cabo Negro*, Jul. 1882.

Obs. Iodi ope nulla; in peritheciis ascigeris adsunt etiam spermatia innumera, minutissima, elliptica v. subnavicularia (2-2,5 × 0,7-1 μ), utrinque acutiuscule rotundata, hyalina.

150. Teichospora Bovei Speg. (n. sp.).

Diag. Euteichospora; perithecia hinc inde plus minusve dense gregaria, saepe subseriata e globoso conoidea, subdifformia (350-450 μ diam.), endophleo denudato plus minusve immersa v. ligno denudato insidentia, recta v. obliqua, atra, carbonacea, glabra laevia, ostiolo crasso, obtuso saepius difformi plus minusve evoluto donata; asci cylindracei, apice obtusissime rotundati crasseque tunicati, 1-foveolati, basi longiuscule attenuato-pedicellati, octospori (120-140 × 10 μ), paraphysibus densis non v. vix longioribus obvallati; sporae oblique monostichae, ellipticae, triseptatae, ad septum medium valide constrictae, loculis 1-v. 2 internis septo altero verticali (rarius deficiente) donatis, utrinque obtuse acutatae

rectae v. rarius subcurvulae, magnitudine ludentes (12-22 × 5-10 μ = saepius 16-18 × 7-8 μ), fuligineae.

Hab. Ad ramos dejectos putrescentes *Genistae* species indeterminatae prope *Misioneros* secus *Rio S. Cruz*, Jan. 82.

151. Selinia antarctica Speg. (n. sp.).

Diag. Perithecia solitaria v. hinc inde 3-5 stromate carnosulo, ceraceo-rubescente plus minusve evoluto aggregata, matrice semimmersa, majuscula, globosa (500-800 μ diam.), sicca rosea, uda aurantiaca, ostiolo crassiusculo, papillulato, atro donata, crassiuscule carnosula, contextu indistincto, aurantio-melleo; asci obclavati, antice attenuati, ac crassissime tunicati (steriles), apiceque subtruncato rotundati, postice abrupte in pedicello brevissimo, crasso, noduloso contracti (100-135 × 25 μ), octospori, aparaphysati; sporae recte v. oblique distichae, elliptico-limoniformes (25-30 × 12-13 μ), utrinque acutiusculae ac saepe subapiculatae, laeves, hyalinae.

Hab. In fimo struthionum (*Rio S. Cruz*), equino et ovino (*Gregory bay*) nec non vaccino (*Punta Arenas*) vulgatissima, aut. et hiem. 1882.

152. Nectria hematochroma Speg. — Fung. Arg. pug. IV, n. 196.

Hab. Ad corticem putrescentem *Salicis Humboldtianae* secus *Rio Negro*, Aug. 1883.

153. Gibberella pulicaris (Fr.) Sacc. — Syll. Fung. vol. II, p. 552.

Hab. Ad culmos dejectos putrescentes *Zeae Maydis* prope *Bahia Blanca*, Aug. 1886.

154. Montagnella tordillensis Speg. — Fung. Arg. pug. IV, n. 189.

Hab. Ad folia viva *Iodinae rhombifoliae* prope *Bahia Blanca*, Aug. 1886.

Obs. Specimina adhuc non matura, tamen mox dignoscenda.

CYTTARIEAE Speg.

155. Cyttaria Darwinii Berk.

Hab. Vulgatissima ad ramos vivos *Fagi antarcticae* in sylvis prope *Punta Arenas, Cabo Negro, Voces bay*, aut. et hiem. 1882.

Obs. Genus *Cyttaria* Berk. meo sensu, tribus a discomycetibus longe abthorrentem constituit, praecipue vegetatione paradoxa epiphyta perenni, structura totius stromatis, dehiscentia loculorum, a pyrenomycetibus etiam longe distat.

156. Cyttaria Berterii Berk. — Mntng. in Gay Fl. Chil. Bot. vol. VII, p. 467.

Hab. Ad ramos *Fagi obliquae* in sylvis prope *Nahuelhuapí*, anno 1879.

157. Cyttaria Hookeri Berk.

Hab. Ad ramos vivo *Fagi antarcticae* et *F. betuloidis* in sylvis prope *Cabo Negro*, Jul. 1882.

Obs. Haec species facile a genere Cyttaria separanda et novum genus constituere digna!

DISCOMYCETEAE Fr.

158. Mitrula? antarctica Speg. (n. sp.).

Diag. Solitaria v. 2-3-gregaria, magnitudine ludens (4-7″ alt.), laevissima, glaberrima; stipes teres (3-4″ × 1,5-2‴) elongatus, sursum gradatim parceque incrassatus, deorsum longe attenuatus, basi saepe contortus, fusco-

rufescens v. fusco-carneus; clava in juventute teres, dein compressa, spathulato-clavata (2–3″ × 6‴ × 2–3‴) fistulosa, rugulosa saepeque hinc inde plicatula, ex albo mellea, saepeque subceraceo–pellucida, antice obtuse rotundata, postice attenuata basique abrupte irregulariterque anulato-constricta atque stipite imposita.

Hab. Inter folia dejecta putrescentia in sylvis prope *Voces bay*, Maj. 1882.

Obs. Descriptio haec in vivo peracta; notae fructificationis, speciminibus amissis, mihi ignotae.

159. Ascobolus furfuraceus Pers. — Syn. pag. 676.

Hab. In fimo vaccino vetusto in sylvaticis prope *Punta Arenas*, Apr. 1882.

160. Humaria granulata Bull. — Champ. p. 258, tab. 433, fig. 3.

Hab. In fimo vaccino vetusto in uliginosis secus *Rio Gallego*, Jul. 1882.

Obs. Species haec duo omnino cum speciminibus europeis congruentes.

161. Ascophanus patagonicus Speg. (n. sp.).

Diag. Ascomata sparsa v. hinc inde laxe gregaria, rubescenti v. flavescenti-ceracea, hemisphaerica (0,5–1‴ diam.), superne applanato-concava, margine integra, extus glaberrima; asci clavulato-saccati (20 × 8 μ), sessiles, aparaphysati, octospori, sporae inordinate di-tristichae, ellipticae, nonnihil inaequilaterales, utrinque obtusiusculae (7-9 × 3 μ), hyalinae. Iodi ope nulla.

Hab. In fimo *Aucheniae guanaco* in *meseta* secus *Rio S. Cruz*, Aug. 1882.

162. Patinella? antarctica Speg. (n. sp.).

Diag. Ascomata sparsa, hemisphaerico-cupulata, minuta

(300-350 μ diam.), atra, laevissima, glaberrima, disco concaviusculo non v. vix pallidiore, carnosulo-subcarbonacea, contextu epithecii dense minutissimeque merenchymatico, olivaceo; asci cylindracei, subtorulosi, apice obtuse rotundati, postice in stipite crasso ac breviusculo producti (65-70 × 7-8 μ), octospori, aparaphysati, muco fuscescente tenacissimo immersi; sporae recte v. oblique distichae, ellipticae (10-11 × 5-6,5 μ), utrinque obtusae, hyalinae non v. grosse 1-ocellatae. Iodi ope nulla.

Hab. In stercore vetusto *Rheae Darwinii* in altiplanitie, *meseta* vocata, secus *Rio S. Cruz*, Aug. 1882.

MYXOMYCETEAE (Fr.) DBy.

163. Licea antarctica Speg. (n. sp.).

Diag. Sporangia saepius hinc inde 5-20-gregaria, rarius solitaria, hypothallo submembranaceo-floccululoso concolore insidentia, obovata (0,5-0,7‴), sessilia, murino-fulvescentia, glabra, laevia; membrana simplex, tenuis fulvella, anhista, sub lente rugulosa; capillitium parcissimum e tubulis exillimis (1 μ cras.), non v. vix ramulosis, laxissime papillosis, obscure fulvescenti-fuligineis compositum; sporae globosae (10–11 μ diam.), episporio crassiusculo minute denseque asperulo donatae, e hyalino pallide roseo-fulvescentes.

Hab. Ad truncos cariosos *Fagi antarcticae* in sylvis prope *Punta Arenas*, April. 1882.

FUNGI IMPERFECTI

164. Phoma Bergii Speg. — Fung. Arg. pug. III, n. 100.

Hab. Vulgata ad folia viva et emortua *Chuquiragae erinaceae* prope *Misioneros* secus *Rio S. Cruz*, per ann. 1879-82.

165. PHOMA ANTARCTICA Speg. (n. sp.).

Diag. Perithecia densiuscule sparsa, subepidermica, lenticularia (100-140 μ diam.), atra, glabra, epidermide nonnihil nigrificata adnata, ostiolo minutissimo, papillaeformi donata, coriacella, contextu subindistincto, dense minutissimeque parenchymatico, olivaceo; sterigmata cylindracea, breviuscula (8-10 × 2 μ), apice acuta, hyalina; sporulae cylindraceo-ellipticae v. ovoideae (5-6 × 1,5-2 μ), utrinque acutae, grosse 1-guttulatae, hyalinae.

Hab. Ad folia emortua *Azorellae* cujusdam in marittimis *Gregory bay*, Jul. 1882.

166. PHOMA TANDILENSIS Speg. — Fung. Arg. pug. IV, n. 279.

Hab. Ad folia et petiolos emortua putrescentia *Margyricarpi* cujusdam prope *Bahia Blanca*, Aug. 1886.

167. APOSPHAERIA FRETICOLA Speg. (n. sp.).

Diag. Perithecia sparsa v. laxe hinc inde gregaria ex ovoideo pyriformia (160-180 μ diam.), basi matrici insculpta, atra, carbonacea, laevissima, glaberrima, subnitentia, contextu indistincto; sterigmata parvula e bacillari subclavulata (5-12 × 1 μ), apice obtusa, hyalina; sporulae minutissimae, ellipticae, utrinque rotundatae ac grosse 1-guttulatae (2,5 × 1 μ), hyalinae.

Hab. Ad ramos emortuos *Fagi antarcticae* in sylvis prope *Punta Arenas*, April. 1882.

168. PLACOSPHAERIA? MAGELLANICA Speg. (n. sp.).

Diag. Stromata sparsa, parenchymate innata, prominula, lenticularia v. lenticulari-subconoidea (280-350 μ diam.), atra, glabra, rugulosa, 1-3-locularia, membranaceo-coriacella, contextu grosse parenchymatico-celluloso, fuligineo, atro; sterigmata non visa; sporulae minutis-

simae, cylindraceae (3-4 × 0,5 μ), utrinque truncatae, saepeque minute biguttulatae, hyalinae.

Hab. Ad folia emortua putrescentia *Bromi macranthi* prope *Gregory bay*, April. 1882.

Obs. Species facillime in genere *Melasmia* transferenda.

169. Coniothyrium Bergii Speg. — Fung. Arg. pug. III, n. 114.

Hab. Vulgatissimum ad spinas nec non ramulos *Berberidis empetrifoliae, heterophyllae, dulcis, ilicifoliae* per tota *Patagonia*, per ann. 1874-83.

170. Ascochyta patagonica Speg. — Fung. Arg. pug. III, n. 123.

Hab. Ad petiolos nec non scapos *Anemonis sphaenophyllae* in uliginosis secus *Rio S. Cruz*, Aug. 1882.

171. Actinonema rosae (Lib.) Fr. — S. v. Sc., p. 424.

Hab. Vulgatum ad folia languida *Rosarum* cultarum in *Patagones*, Sept. 1883.

172. Diplodia salicina Lév. — Ann. Sc. nat. 1846, V, p. 292.

Hab. Ad ramulos dejectos putrescentes *Salicis Humboldtianae* prope *Bahia Blanca*, Aug. 1886.

173. Septoria bowlesiae Speg. — Fung. Arg. pug. IV, n. 285.

Hab. Ad folia viva v. languida *Bowlesiae tenerae* in *Chubut*, ann. 1883.

174. Camarosporium Roumegueri Sacc.—Speg., Fung. Arg. pug. III, n. 125.

Hab. In caulibus languentibus *Salicorniae peruvianae* in *Isla de los liones de mar* in *Rio S. Cruz*, ann. 1874.

175. Camarosporium patagonicum Speg. — Fung. Arg. pug. III, n. 126.
Hab. Ad folia viva v. languida *Atriplicis* cujusdam prope *Rio S. Cruz*, ann. 1874.

176. Vermicularia dematium (Pers.) Fr. — S. v. Sc. p. 420.
Hab. Ad caules dejectos putrescentes herbarum secus *Rio Gllego* et prope *P. Arenas*, hiem. 1882.

177. Blennoria patagonica Speg. (n. sp.).
Diag. Acervuli saepius hypophylli, laxe gregarii v. sparsi, erumpentes epidermideque laciniata cincti, compactiusculi, udi irregulariter patellari-aperti, disco tumido fuscescente, sicci ruguloso-contracti, sordide argillaceo-fusci (250-400 μ diam.); sterigmata non visa; conidia e strato proligero, carnosulo, fulvo-fusco, dense minutissimeque celluloso, catenulatim exsurgentia, simplicia, bacillaria (15-20 × 1-1,5 μ), utrinque truncata hyalina.
Hab. Vulgatissima ad folia dejecta putrescentia *Berberidis heterophyllae* prope *Rio S. Cruz* et *Gallego*, nec non *Gregory bay*, *Punta Arenas*, hieme 1882.

178. Trullula tehuelches Speg. (n. sp.).
Diag. Perithecia sparsa v. gregaria, innato-erumpentia, hemisphaerico-subcupulata (90-100 μ diam.), atra, glabra rugulosa, contextu epithecii subcarbonaceo, externe atro interne subviolascente, subindistincte parenchymatico; sterigmata fasciculata, articulato-nodulosa, parce ramulosa, hyalina, longitudine varia; conidia acro-pleurogena, catenulata, cylindracea, utrinque truncata (3-6 × 1 μ), ac 1-guttulata, hyalina.
Hab. Ad ramulos emortuos *Lepidophylli cupressiformis* in *meseta* secus *Rio Gallego*, Aug. 1882.
Obs. Species, pseudoperitheciorum presentia, melius inter subcupulatas (sub *Godrionella !*) adscribenda.

179. Fusidium magellanicum Speg. (n. sp.).
Diag. Maculae majusculae (2-5‴ diam.), pallescenti-arescentes, subindeterminatae, concentrice rugulosae; acervuli amphigeni, minutissimi, dense gregarii saepeque confluentes, candidi; hyphae non v. vix evolutae, gracillimae, repentes, non v. vix ramulosae, hyalinae; conidia catenulata, cylindracea, continua (rarius medio 1-septata sed non constricta), utrinque acutiuscula (sed vertice truncatulo), recta v. subcurvula (12-30 × 2-2,5 μ), hyalina.
Hab. Ad folia viva *Casaleae* cujusdam in rivulis prope *Gregory bay*, Apr. 1882.

180. Oidium erysiphoide Fr. — Syst. myc. III, p. 432.
Hab. Formas plurimas hinc inde inveni:
I. *Madia viscosa* prope *Punta Arenas.*
II. *Fumaria capreolata* prope *Bahia Blanca.*
III. *Oxalis martiana*? prope *Bahia Blanca.*
IV. *Geranium patagonicum* in *Puerto Deseado.*
V. *Adesmiae* spec. in *Santa Cruz.*

181. Oidium Tuckerii Berk. — in Mon. Belg. 1850, IX, 2383.
Hab. Ad folia viva *Vitis viniferae* prope *Carmen de Patagones,* Aug. 1883.

182. Oidium leucoconium Desm.
Hab. Ad folia languida *Rosarum* cultarum vulgatissima in *Bahia Blanca* et *Patagones* per ann. 1883-86.

183. Aspergillus glaucus Lk.
Hab. Ad bulbos dejectos putrescentes *Allii coepae* prope *Patagones,* Sept. 1883.

184. Penicillium glaucum Lk.
Hab. In pane corrupto prope *Misioneros* secus *Rio S. Cruz,* Jan. 1882.

185. Coniosporium arundinis Cda.
Hab. In culmos dejectos putrescentes *Gynerii argentei* in paludibus prope *Bahia Blanca,* Aug. 1886.

186. Cladosporium herbarum Lk. — Obs. myc. II, p. 37.
Hab. Ad folia dejecta *Populi carolinianae* (*Bahia Blanca*) et *Mayteni magellanici* et *Embotryi coccinei* prope *Gregory bay*, Apr. 82 et Aug. 86.

187. Cercospora vitis (Lév.) Sacc.
Hab. Ad folia viva v. languida *Vitis viniferae* prope *Carmen de Patagones,* Aug. 1883.

188. Stylbum aurantio-cinnabarinum Speg. — Fung. Arg. pug. IV, n. 346.
Hab. Ad truncos emortuos *Duwauae* cujusdam prope *Bahia Blanca,* Aug. 1886.

189. Sporocybe antarctica Speg. (n. sp.).
Diag. Stromata sparsa v. hinc inde plus minusve dense gregaria, matrice dealbata insidentia, atra, stipite setaceo, recto v. subflexuoso, cylindraceo (2''' alt. $\times$ 100-150 μ crass.), inferne non v. vix incrassatulo, superne abrupte in capitulo subgloboso v. subhemisphaerico, vix pallidiore expanso, contextu prosenchymatico subindistinco olivaceo-donata ; conidia globosa, minuta (2-3 μ diam.), grosse 1-guttulata olivacea.
Hab. Vulgatissima ad truncos decorticatos cariosos *Fagi antarcticae* prope *Cabo Negro, P. Arenas, Voces bay,* aut et hiem. 1882.

190. Fusarium heterosporum Nees.
Hab. Vulgatum ad *Sclerotium clavum* in graminaceis parasitans, *Rio S. Cruz, Gregory bay,* Aut. 1882.

MYCELIA STERILIA

191. Anthina? muscigena Speg. — Fung. Arg. pug. IV, n. 365.
Hab. Ad muscos truncos vestientes vulgata prope *Voces bay*, Maj. 1882.

192. Rhizoctonia violacea Tul.?
Hab. Ad bulbos *Alsthroemeriae pygmeae* in *meseta* secus *Rio Gallego*, Jul. 1882.

193. Rhizomorpha subcorticalis Pers. — Syn. p. 704.
Hab. Ad truncos emortuos *Fagi antarcticae* prope *Punta Arenas*, Jul. 1882.

194. Sclerotium? dothideoide Speg. (n. sp.).
Diag. Stromata lenticularia, parenchymate foliorum innata ad epiphyllum discoideo-convexula (0,5‴ diam.), atra laevissima, subnitentia, ad hypophyllum non v. vix erumpenti-prominula, intus alba, compacto-subcornea, homogenea.
Hab. Vulgatissimum ad folia dejecta putrescentia *Berberidis buxifoliae* et *B. heterophyllae* prope *P. Arenas*, Jul. 1882.

195 Sclerotium Claivus DC.
Hab. Vulgatus ad cariopsides *Spartinae* cujusdam prope *Misioneros*, *Rio S. Cruz*, et *Phlaei Alopecurique* in *Gregory bay*, Apr. et Aug. 82.

La Plata, 1° Martio 1887.

OBSERVACIONES METEOROLÓGICAS

PRACTICADAS

EN CÓRDOBA (República Argentina)

DURANTE EL AÑO 1886

POR

OSCAR DOERING

Las observaciones que habia principiado el año 1882, se han hecho durante el año 1886 sin alteracion y en las mismas condiciones que ántes.

Ha sido necesario hacer los cambios siguientes en los instrumentos :

Desde el 4 de Noviembre se han observado las temperaturas máximas del aire con el termómetro Fuess nº 927 ; las temperaturas máximas de la superficie del suelo desde el 22 de Junio con el termómetro nº 21 y desde el 4 de Noviembre con el nº 334 que habia servido hasta entónces para la temperatura máxima del aire. El 6 de Diciembre era menester reemplazarlo por el nº 977.

Las temperaturas mínimas de la superficie se han tomado, á contar del 6 de Diciembre, con el termómetro nº 932.

Para la observacion á la profundidad de 1.26 m. se ha empleado el nº 73 desde el 18 de Julio.

Todas las correcciones instrumentales han sido tomadas en cuenta en las observaciones que siguen y que van acompañadas, al final, de los resúmenes mensuales.

PRESION ATMOSFÉRICA (700 *mm.* +...)

CORDOBA, 1886

Tab. I, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	25.64	23.06	24.07	23.05	22.45	24.09	23.19	23.89	27.15
2	24.57	22.25	22.20	27.36	26.60	26.44	27.97	27.51	27.60
3	24.22	21.81	23.11	26.79	25.33	25.99	26.51	23.81	23.37
4	24.03	23.33	23.28	27.81	26.34	28.76	23.61	21.80	23.33
5	22.91	20.07	19.73	29.38	27.00	27.95	25.09	22.33	22.24
6	27.56	26.87	28.06	29.83	27.68	28.48	21.55	25.03	26.25
7	27.58	23.99	25.00	29.25	28.45	29.13	27.56	26.10	26.41
8	24.80	24.57	25.00	28.57	25.65	25.88	25.51	22.82	23.71
9	23.57	21.30	21.59	24.57	22.42	22.90	25.10	23.33	25.35
10	21.51	18.97	22.87	21.10	19.07	22.47	26.04	23.76	25.13
11	25.36	24.45	23.48	22.85	19.02	21.81	26.62	22.96	23.87
12	20.63	17.32	18.58	21.79	*18.96*	19.24	22.52	19.17	21.98
13	18.31	*15.80*	20.82	24.37	25.09	27.16	23.06	20.43	20.26
14	23.36	22.99	23.88	32.30	32.19	33.08	22.32	23.52	24.58
15	23.17	20.79	20.92	**33.12**	31.80	30.46	27.94	26.22	26.18
16	23.53	21.84	22.54	29.96	28 73	31.07	25.29	23.49	24.53
17	26.04	25.90	26.76	32.79	31.31	30.52	25.34	24.31	24.85
18	23.99	20.09	19.04	30.60	28.45	29.29	22.75	*18.49*	23.10
19	26.45	25.97	27.15	29.75	27.75	27.80	25.20	24.59	26.38
20	26.77	24.15	24.50	26.79	23.21	24.88	26.72	25.00	26.04
21	23.07	20.93	20.17	25.66	26.30	25.16	25.78	25.02	28.03
22	25.82	26.42	26.36	26.71	25.76	27.02	29.09	29.46	23.18
23	28.13	25.46	24.59	26.39	23.54	24.50	32.95	32.37	33.15
24	26.33	27.00	28.65	23.12	23.49	26.50	**34.50**	32.90	34.37
25	**28.80**	26.35	26.99	24.65	22.88	25.04	34.46	32.67	33.25
26	27.09	24.75	25.40	24.68	23.20	24.10	31.23	28.89	29.71
27	26.55	24.24	25.36	23.90	22.87	23.21	29.14	28.22	30.29
28	26.64	24.03	24.94	24.61	20.31	19.67	30.98	29.35	30.63
29	25.06	23.31	24.75				29.21	27.04	28.56
30	25.64	25.45	26.77				29.13	26.61	27.76
31	25.54	22.06	22.05				27.54	24.44	25.52
1–10	24.64	22.62	23.49	26.77	25.10	26.21	25.21	24.04	25.05
11–20	23.76	21.93	22.77	28.43	26.65	27.53	24.78	22.82	24.18
21–31	26.24	24.55	25.09	24.96	23.54	24.40	30.36	28.82	30.31
Promedio.	24.92	23.08	23.83	26.85	25.21	26.16	26.90	25.34	26.64

PRESION ATMOSFÉRICA (700 *mm.* +...)

CÓRDOBA, 1886

Tab. I, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	27.00	25.40	26.57	27.24	25.09	27.91	23.18	24.68	26.40
2	26.86	25.09	25.65	28.92	28.59	31.17	28.85	29.71	33.03
3	24.62	24.13	26.30	30.93	29.29	31.56	33.91	30.00	27.85
4	27.86	29.06	30.92	31.14	28.30	27.99	23.49	22.95	26.22
5	31.70	28.54	27.75	24.98	22.09	23.56	28.12	28.78	31.77
6	25.79	24.80	25.93	23.81	20.45	25.02	31.46	30.44	33.05
7	23.26	*18.51*	19.40	29.36	28.29	29.46	33.52	33.63	35.29
8	25.13	21.50	23.08	28.83	28.15	28.56	33.59	31.66	32.73
9	23.23	23.04	25.26	25.30	27.92	31.50	31.98	29.66	31.48
10	24.44	23.56	28.49	34.88	32.89	35.04	31.03	28.31	29.60
11	**36.86**	35.00	36.16	**36.15**	34.86	35.76	27.72	24.80	26.66
12	36.16	36.50	35.57	31.37	31.49	31.87	24.73	23.26	27.51
13	34.46	31.73	32.71	30.82	29.57	31.78	29.45	30.16	32.25
14	30.71	27.29	28.75	32.19	30.65	34.09	32.78	30.86	33.17
15	27.89	26.60	27.94	35.31	34.33	36.06	31.40	29.48	31.04
16	27.91	27.53	30.08	34.66	31.00	30.48	31.37	31.14	32.55
17	28.51	25.13	26.52	28.58	29.40	30.52	31.88	30.81	34.55
18	26.43	24.12	25.65	29.49	25.54	26.28	37.20	36.54	34.63
19	26.01	24.62	26.63	24.16	23.09	27.10	28.37	21.47	29.13
20	28.06	26.74	30.05	28.98	28.08	27.26	32.00	33.87	37.06
21	32.00	31.50	30.85	23.81	20.19	23.41	**38.25**	36.67	36.05
22	27.56	26.80	28.97	25.50	29.34	32.81	33.04	29.14	29.04
23	28.85	27.38	31.41	35.65	33.47	33.91	27.05	27.67	30.80
24	34.25	33.18	34.17	30.58	27.47	27.26	31.29	28.71	29.19
25	33.03	30.09	31.25	25.69	24.86	29.16	26.15	22.76	23.40
26	31.08	29.40	31.54	30.56	28.76	28.90	*21.03*	23.84	27.84
27	32.06	29.46	31.37	27.37	25.02	26.61	26.15	22.59	27.87
28	31.15	30.78	33.82	25.84	22.41	24.26	29.06	28.47	32.75
29	33.02	31.96	33.95	24.07	20.76	22.59	32.62	30.36	30.23
30	34.26	30.59	29.84	20.50	*19.08*	21.02	29.31	28.29	30.64
31				22.73	23.42	24.85			
1–10	25.99	24.36	25.91	28.54	27.11	29.18	29.91	28.98	30.74
11–20	30.30	28.53	30.01	31.47	29.80	31.12	30.69	29.24	31.85
21–31	31.73	30.11	31.67	26.57	24.98	26.80	29.40	27.85	29.78
Promedio.	29.34	27.67	29.20	28.79	27.22	28.96	30.00	28.69	30.79

PRESION ATMOSFÈRICA (700 *mm.* +...)

CÓRDOBA, 1886

Tab. I, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	29.35	26.26	28.17	28.71	31.71	32.16	23.53	20.29	28.63
2	29.11	29.20	31.67	30.80	30.22	33.46	32 66	28.30	27.48
3	33.91	33.02	32.81	35.84	33.40	34.29	23.59	20.37	25.03
4	29.53	26.60	26.43	34.39	32.07	34.46	26.81	23.78	27.63
5	26.05	24.79	25.47	34.84	32.46	34.91	28.97	26.92	29.76
6	25.51	28.84	32.06	35.19	32.48	33.23	28.84	26.98	29.63
7	28.88	23.56	23.03	32.22	28.60	29.70	28.43	25.24	26.66
8	30.22	32.93	38.63	24.97	20.15	22 59	25.88	26.03	28.36
9	**42.17**	40.57	41.64	30.84	29.52	30.14	28.64	26.33	28.24
10	40.12	36.30	35.59	27.48	25.73	27.40	33.87	33.52	34.76
11	32.05	29.68	31.93	25.71	21.39	22.26	33.93	30.10	30.03
12	33.82	33.04	34.81	29 83	29.34	31.00	28.11	25.84	27.28
13	35.60	34.21	34.25	28.67	24 96	28.34	26.08	21.63	22.18
14	31.44	28.31	28.22	34.56	32.85	33.72	23.72	25.13	30.47
15	32.39	32.41	35.54	29.82	24.50	26.16	30.22	25.32	25.50
16	35.69	33.85	34.69	23.83	*19 81*	20 06	23.92	*19.92*	23.40
17	32.31	30.46	31.51	19.87	27.07	30.80	26.13	26.42	30.96
18	29.60	26.99	27.91	32.44	29.78	30.58	35.47	33.83	36.65
19	25.14	22.81	24.59	28.42	32.61	35.68	35.82	32.85	33.40
20	24.59	21.76	24.33	37.22	35.36	37.59	30.80	31.45	33.80
21	30.97	30 97	33.17	**38.97**	36.88	37.80	33.14	30.97	32.22
22	32.66	30.49	30.97	36.54	34.23	34.92	31.31	25 80	26.80
23	30.36	27.26	27.94	32.51	29.16	29.75	29.86	30.40	33.42
24	25.18	23.91	29 10	30.50	28.15	29.39	36.44	36.68	**38.81**
25	31.79	29.69	31.38	26.02	22.50	26.26	37.50	34.11	35.09
26	31.07	28.17	28.25	29.48	29.31	32.19	33.17	30 20	32.45
27	23.69	20.02	25.58	32.97	30.75	32.83	32.45	30.17	31.59
28	33.27	31.86	32.68	32.36	30.50	31.58	30.06	25.95	27.94
29	32.57	30.33	30 46	32.00	29.87	31.68	29.20	28.41	31.10
30	26.46	22.32	22.64	31.75	29.94	32.67	31.71	32.70	34.43
31	*19.00*	20.55	27.29	31.72	27.24	27.28			
1--10	31.48	30.21	31.55	31.53	29.63	31.23	28.12	25.78	28.62
11–20	31.26	29.35	30.78	29.04	27.77	29.62	29.15	27.25	29.37
21–31	28.82	26.87	29.04	32.26	29.87	31.49	32.48	30.54	32.39
Promedio.	30.47	28.75	30.41	30.98	29.11	30 80	30.02	27.85	30.12

PRESION ATMOSFÉRICA (700 *mm.* +...)

CÓRDOBA, 1886

Tab. I, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	32.60	31.75	33.20	27.44	24.20	26.77	**32.02**	28.70	29.22
2	32.85	30.15	29.80	29.00	26.28	29.57	27.59	25.08	26.36
3	26.49	22.66	24.67	29.66	27.04	28.00	27.91	26.88	28.43
4	30.68	29.86	33.79	27.21	24.64	26 73	30.34	28.17	27.92
5	**34.35**	30.91	33.15	28.00	25.90	26.83	26.84	22.32	20.83
6	31.50	28.00	29.76	27.90	27.84	31.26	18.35	*14.02*	16.64
7	28.41	26.29	29.63	29.95	26.92	27.19	23.87	24.58	26.85
8	30.56	27.50	29.34	25.20	21.26	22.91	29.24	27.52	28.69
9	30.86	28.31	30.80	22.86	25.86	28.74	28.56	24.94	24.98
10	32.34	30.19	31.92	33.58	33.60	**36.28**	27.98	24.81	24.55
11	33.06	28.84	29.88	35.83	33.93	35.41	24 02	27.54	28.52
12	29.21	25.46	27.23	34.25	31.25	32.38	28.74	24.25	22.66
13	28.86	28.48	31.07	31.56	28.66	28.68	22.60	21.38	23.69
14	31.94	30.14	30.75	26.92	21.73	21.27	25.91	23.28	24.65
15	28.40	22.86	24.55	20.17	16.31	*16.23*	25.31	22.93	24.14
16	27.88	23.71	24 20	20.67	19.91	24.64	25.70	23.62	25.22
17	22.43	*18.31*	23.44	28.33	24.85	27.48	25.91	23.75	23.93
18	31.58	30.75	32.52	27.79	23.52	24.33	22.71	19.12	26.65
19	32.29	27.61	27.44	23.96	19.32	20.40	28.13	24.27	25.34
20	24.14	19.69	27.05	22.96	20.83	22.33	25.65	21.48	22.12
21	32.62	30.23	30.34	25.67	23.74	24.91	23.00	27.25	29.13
22	26.45	20.84	22.47	25.65	22 36	27.77	29.67	25.54	24.85
23	23.61	21.81	25.95	28.08	26.90	27.60	25.79	24.85	25.73
24	28.77	28.15	30.23	25.32	20.50	20.67	26.79	24.34	24.91
25	29.57	26.86	29.16	26.89	25.98	27.96	23.85	22.27	21.95
26	30.03	28.60	30.67	28.20	23.94	22.56	22.92	18.89	17.63
27	32.39	28.18	28.40	21.63	19.88	23.59	16.01	17.26	21.80
28	28.16	24.96	27.00	24.37	19.07	18.34	24.69	23.50	24.74
29	32.00	28.53	31.00	22.98	21.98	25.76	24.67	24.30	25.44
30	30.30	29.15	30.55	29.19	28.03	30.00	25.19	21.33	20.41
31	30.09	27.03	28.17				20.47	26.14	25.65
1–10	31.06	28.56	30.61	28.08	26.35	26.43	27.27	24.70	25.45
11–20	28.88	25.59	27.81	27.24	24.03	25.42	25.47	23.16	24.69
21–31	29.45	26.76	28.54	25.80	23.24	24.91	23.91	23.24	23.84
Promedio.	29.79	26.96	28.97	27.04	24.54	25.59	25.50	23.69	24.63

TEMPERATURA DEL AIRE EN CÓRDOBA

Enero, 1886

Tab. II, 1.

FECHA	7 a.	2 p.	9 p.	M	m
1	21.0	30.4	20.0	30.6	18.0
2	20.4	29.8	24.5	31.3	12.7
3	18.6	24 3	20.0	25.8	18.1
4	18.4	28.6	22.7	31.5	14.0
5	19.6	32.4	24.3	32.9	14.4
6	22.6	30.0	21.0	30.7	18.5
7	18.6	31.4	23.8	31.4	11.6
8	22.8	21.6	21.3	30.6	17.6
9	20.0	31.0	25.2	31.1	17 0
10	26.3	31.9	24.4	**35.4**	22.6
11	19.6	25.9	22.5	27.1	19.4
12	22.9	33.0	26.3	33.3	20.0
13	25.2	34.6	19.2	35.3	21.6
14	20.3	29.8	24 2	30.6	17.6
15	22.0	31.4	25.2	31.7	20.0
16	20.4	28.6	25.2	30.0	18.5
17	18.6	23.4	20.2	24.6	18.2
18	19.3	28.6	22.2	29.0	12.5
19	18.2	26.2	18.0	27.1	17.0
20	15.2	28.1	20.0	28.7	*11.1*
21	18.9	30.6	23.0	30.7	14.2
22	19.8	29.2	24.6	31.4	13.1
23	19.2	31.9	26.1	32.3	13.3
24	23.0	19.3	19.8	23.1	21.9
25	18.1	26.8	24.4	27.1	14.0
26	18 9	26.7	20 6	28.2	17.0
27	19.0	27.8	21.8	29.3	16.5
28	20.2	30.2	23.0	31.0	19.5
29	21.4	24.0	16.8	22.0	19.0
30	19.4	27.8	21.1	28.0	16.3
31	18.4	30.6	22.2	30.8	15.1
1–10	20.83	29.41	22.72	31.13	16.45
11–20	20.17	28.96	22.28	29.74	17.59
21–31	19.66	27.72	21.85	28.54	16.35
Promedio...	20.20	28.67	22.27	29.76	16.78

TEMPERATURA DEL AIRE EN CÓRDOBA

Febrero, 1886

Tab. II, 2.

FECHA	7 a.	2 p.	9 p.	M	m
1	23.0	28.2	22.8	31.2	17.0
2	19.9	22.6	19.9	23.0	17.6
3	18.3	25.4	22.2	27.4	17.3
4	20.6	28.6	18.3	29.6	18.4
5	18.6	28.6	25.4	29.2	16.7
6	18.8	27.6	24.0	28.5	15.7
7	19.9	23.6	22.4	24.9	18.8
8	18.8	27.0	20.4	27.9	18.7
9	19.6	23.8	21.4	24.3	16.5
10	20.6	31.8	22.8	32.2	19.5
11	21.4	30.8	21.1	31.9	19.0
12	18.6	23.3	21.1	24.2	18.2
13	14.8	21.4	14.9	21.7	12.7
14	12.2	22.7	15.2	23.4	*8.2*
15	13.6	21.4	17.2	23.1	10.0
16	13.8	29.1	20.4	29.5	10.6
17	16.0	23.6	21.7	25.4	13.9
18	15.1	29.0	20.7	31.0	11.7
19	13.6	30.6	20.8	31.3	10.9
20	19.6	31.5	23.2	31.9	17.0
21	23.8	23.0	23.5	23.9	21.0
22	21.0	29.2	22.6	29.8	17.5
23	20.2	34.6	25.2	**35.6**	17.7
24	21.8	26.4	20.2	34.2	19.0
25	19.8	28.4	22.4	29.2	17.8
26	19.6	26.9	21.6	28.4	17.6
27	18.6	31.4	23.4	32.1	16.2
28	20.6	32.8	26.0	33.3	18.1
1–10	19.81	26.72	21.76	27.82	17.62
11–20	15.87	26.34	19.63	27.34	13.24
21–28	20.68	29.09	23.11	30.81	18.11
Promedio...	18.65	27.26	21.39	28.50	16.20

TEMPERATURA DEL AIRE EN CÓRDOBA

Marzo, 1886

Tab. II, 3.

FECHA	7 a.	2 p.	9 p.	M	m
1	20.4	23.8	19.0	24.7	19.5
2	18.0	20.7	18.9	22.9	17.8
3	17.1	26.6	21.8	26.9	15.2
4	18.0	33.1	23.3	33.7	15.9
5	20.8	31.8	25.6	33.0	18.9
6	23.2	23.0	18.8	30.7	22.0
7	12.8	29.1	18.0	29.9	10.8
8	13.6	31.3	21.0	31.6	11.3
9	16.6	34.4	24.8	34.5	15.0
10	18.8	31.3	24.8	31.9	16.5
11	18.8	33.9	23.6	34.3	17.5
12	17.6	35.0	21.5	**35.8**	15.8
13	19.2	28.8	20.8	29.7	18.3
14	19.6	27.3	19.6	27.7	16.9
15	14.7	20.0	15.0	22.8	14.7
16	11.4	29.4	17.8	29.8	9.7
17	11.2	26.9	18.4	27.8	9.7
18	17.7	29.0	16.1	29.6	15.6
19	13.5	22.8	13.8	22.8	12.8
20	10.2	23.7	17.4	24.2	*8.2*
21	16.2	18.0	17.0	19.7	16.0
22	15.4	16.6	15.0	18.1	14.9
23	15.0	19.0	16.0	19.8	14.3
24	13.4	23.2	15.5	23.6	12.0
25	13.2	21.7	14.4	22.8	11.6
26	12.6	24.7	19.8	25.7	11.3
27	15.0	24.2	18.4	25.9	13.8
28	14.4	22.0	17.8	22.7	12.9
29	13.6	25.4	15.8	25.7	12.9
30	12.4	27.0	19.4	27.7	11.2
31	14.0	27.8	18.1	28.2	12.6
1–10	17.93	28.51	21.60	29.98	16.29
11–20	15.39	27.68	18.40	28.45	13.92
21–31	14.11	22.69	17.02	23.63	13.05
Promedio...	15.75	26.18	18.93	27.23	14.38

TEMPERATURA DEL AIRE EN CÓRDOBA

Abril, 1886

Tab. II, 4.

FECHA	7 a.	2 p.	9 p.	M	m
1	15.0	27.4	20.8	29.1	14.3
2	18.5	27.2	22.7	30.0	16.7
3	20.4	19.0	18.1	22.2	19.8
4	15.4	17.0	14.5	17.8	15.2
5	11.1	23.8	15.8	24.4	10.2
6	9.0	28.2	15.9	28.8	7.8
7	11.2	30.4	18.0	**31.6**	9,5
8	17.2	26.4	17.8	27.3	16.4
9	11.8	19.9	13.4	20.4	10.8
10	11.0	18.4	13.9	19.3	9.1
11	7.0	14.9	4.4	15.2	6.8
12	3.0	13.1	9.6	13.3	*—0.1*
13	9.2	17.1	12.8	17.7	5.4
14	12.2	22.8	14.2	23.0	11.0
15	13.8	25.8	11.5	26.6	13.2
16	5.8	29.4	13.6	30.8	4.3
17	6.7	29.4	16.0	29.8	5.6
18	7.4	30.4	14.6	30.7	6.4
19	8.6	31.1	19.1	31.3	7.1
20	16.4	26.8	16.8	27.2	15.7
21	11.4	12.4	11.9	12.6	10.6
22	11.2	12.4	11.1	13.4	10.4
23	10.8	14.9	11.4	15.2	10.0
24	5.5	16.8	11.1	18.1	5.3
25	3.9	18.9	11.0	19.6	2.3
26	9.2	22.6	10.0	23.4	7.1
27	6.8	21.6	15.8	24.5	5.7
28	7.6	21.8	15.3	25.4	6.2
29	8.7	21.6	16.0	23.7	8.1
30	12.2	18.8	11.8	19.0	11.9
1–10	14.06	23.77	17.09	25.09	12.98
11–20	9.01	24.08	13.26	24.56	7.54
21–30	8.73	18.18	12.54	19.49	7.76
Promedio...	10.60	22.01	14.30	23.05	9.43

TEMPERATURA DEL AIRE EN CÓRDOBA

Mayo, 1886

Tab. II, 5.

FECHA	7 a.	2 p.	9 p.	M	m
1	9.6	24.2	14.2	23.8	9.4
2	10.9	22.0	14.7	22.9	9.6
3	5.2	22.7	14.3	23.7	4.5
4	3.4	21.5	10.4	21.8	2.6
5	10.8	23.7	16.0	25.0	9.7
6	12.0	23.4	14.0	23.7	11.5
7	5.0	18.4	6.3	18.6	4.8
8	1.2	22.7	7.2	23.5	0.3
9	1.8	20.6	8.6	22.6	0.9
10	5.7	18.1	2.3	18.3	0.5
11	1.0	20.4	6.6	21.4	—0.3
12	— 0	21.0	10.3	21.2	—1.0
13	— 0	16.9	10.9	18.9	—0.7
14	1.8	22.1	9.1	23.1	1.0
15	4.8	20.8	6.8	21.5	4.5
16	0.4	21.4	8.0	21.5	—0.4
17	—2 2	23.0	8.4	24.8	**—2.6**
18	1.8	23.3	13.3	23.7	1.5
19	5.8	25.8	10.1	26.1	4.7
20	11.0	19.8	14.6	20.2	8.3
21	12.8	26.8	16.0	27.5	12.4
22	15.2	14.6	9.2	16.6	14.8
23	—0.9	16.7	1.6	18.1	—1.3
24	—1.4	22.6	9.2	23.1	—1.8
25	0.4	25.5	9.2	27.1	+0.1
26	2.9	27.1	9.9	27.4	2.2
27	1.9	30.7	15.8	**31.6**	1.5
28	7.6	30.6	19.6	30.8	7.2
29	11.2	28.9	18.0	29.4	10.6
30	16.6	18.0	14.0	18.7	15.7
31	10.0	11.7	9.4	15.3	9.4
1–10	6.56	21.73	10.80	22.39	5.38
11–20	2.44	21.45	9.81	22.24	1.50
21–31	6.93	23.02	11.99	24.15	6.44
Promedio...	5.36	22.10	10.90	22.96	4.50

TEMPERATURA DEL AIRE EN CÓRDOBA

Junio, 1886

Tab. II, 6.

FECHA	7 a.	2 p.	9 p.	M	m
1	4.0	13.4	6.0	16.0	3.6
2	4.6	15.8	4.4	17.1	4.2
3	—0.8	17.8	6.6	18.1	—1.3
4	1.4	19.8	6.8	22.0	1.0
5	5.5	13.4	8.0	13.6	3.1
6	8.2	9.5	8.2	10.2	6.6
7	7.3	6.8	5.2	7.7	7.2
8	4.6	10.1	7.3	12.2	4.4
9	0.7	15.0	2.8	15.0	— 0
10	—1.8	14.7	4.8	15.1	—2.5
11	4.4	15.3	6.9	15.8	—0.2
12	5.6	16.1	12.6	16.3	4.3
13	10.4	12.3	8.0	12.6	7.1
14	3.6	15.2	4.5	17.3	0.8
15	—0.6	17.8	6.6	19.0	—1.2
16	0.4	17.7	4.0	18.0	0.1
17	—0.8	15.7	10.3	16.0	—1.4
18	6.9	10.2	4.4	11.4	6.7
19	0.9	16.9	9.4	18.1	0.7
20	7.3	12.0	0.8	12.5	7.1
21	—3.8	13.5	0.2	13.8	—4.3
22	—6.6	18.3	2.4	18.6	*—7.0*
23	—3.6	19.9	3.9	19.9	—6.7
24	—1.6	21.7	10.7	22.1	—1.9
25	2.6	24.6	12.6	**25.1**	1.1
26	11.6	22.8	14.4	24.5	10.5
27	13.2	22.2	13.6	22.8	13.0
28	11.0	15.6	9.3	16.8	9.1
29	2.8	13.2	2.7	13.8	2.4
30	3.0	12.6	7.9	12.9	—0.5
1–10	3.37	13.63	6.01	14.70	2.63
11–20	3.81	14.92	6.75	15.70	2.40
21–30	2.86	18.44	7.75	19.03	1.57
Promedio...	3.35	15.66	6.84	16.48	2.20

TEMPERATURA DEL AIRE EN CÓRDOBA

Julio, 1886

Tab. II, 7.

FECHA	7 a.	2 p.	9 p.	M	m
1	4.0	17.8	6.7	18.4	3.5
2	1.7	17.2	4.4	17.5	—1.6
3	—1.3	17.8	4.2	18.2	—2.5
4	—0.5	21.6	4.4	21.9	—0.8
5	2.8	21.2	3.4	21.8	—0.6
6	1.0	16.9	4.6	19.8	—0.9
7	0.2	17.4	6.5	17.8	—0.3
8	7.4	9.8	5.6	11.5	3.2
9	—4.5	8.9	—4.2	9.7	—5.0
10	—9.3	13.6	—0.6	13.6	**—9.9**
11	—5.2	14.3	3.1	15.3	—6.3
12	—6.0	17.4	0.2	17.4	—6.5
13	—4.2	18.1	3.8	18.5	—5.3
14	—5.0	20.6	9.0	21.5	—5.3
15	0.7	21.5	4.7	21.5	0.1
16	—2.1	18.3	6.0	18.4	—2.4
17	5.1	18.8	9.0	19.5	2.2
18	6.2	21.4	11.4	21.8	5.5
19	4.8	26.6	13.8	28.1	4.5
20	4.7	24.4	9.9	24.6	3.8
21	11.2	18.4	6.7	18.9	5.5
22	6.6	16.7	8.5	17.2	4.9
23	2.6	22.1	9.0	22.6	1.9
24	11.8	24.5	15.0	24.7	5.9
25	8.6	22.1	9.0	22.5	6.6
26	3.2	23.1	15.8	24.6	2.6
27	11.8	29.8	19.2	**30.3**	10.9
28	12.0	13.4	5.0	14.0	10.8
29	2.8	18.6	6.8	19.0	—0.2
30	6.6	25.6	13.6	26.1	0.8
31	4.3	21.7	14.6	25.8	3.5
1-10	0.15	16.22	3.50	17.03	—1.49
11-20	—0.10	20.14	7.09	20.66	—0.97
21-31	7.41	21.45	11.20	22.34	4.84
Promedio...	2.65	19.34	7.39	20.08	0.91

TEMPERATURA DEL AIRE EN CÓRDOBA

Agosto, 1886

Tab. II, 8.

FECHA	7 a.	2 p.	9 p.	M	m
1	9.6	16.4	4.8	17.6	9.4
2	—1.2	21.4	8.0	22.3	—1.8
3	—1.3	18.6	8.6	18.6	—1 5
4	—0.6	21.5	6.7	22.7	—1.2
5	—0.5	19.5	7.9	20.2	—1.0
6	2.4	17.1	4.8	17.2	2.0
7	0	20.2	6.6	20.4	—0.5
8	9.3	24.4	16.5	26.2	4.6
9	10.6	19.7	5.2	19.8	10.6
10	—1.3	23.0	7.7	23.6	—2.0
11	5.0	25.5	13.1	26.8	2.7
12	11.0	17.4	4.8	18.3	7.6
13	2.6	22.6	8.2	23.0	0.1
14	3.9	16.2	3.1	16.6	3.3
15	9.4	17.4	7.3	19.6	—2.4
16	—1.8	28.0	11.5	**28.6**	—2.4
17	18.0	18.7	5.3	21.5	8.9
18	—0.6	17.4	8.2	17.6	—1.3
19	6.1	16.7	6.0	17.1	4.2
20	2.4	17.1	3.7	17.3	—1.8
21	—1.2	17.6	6.2	18.2	—2.5
22	—1.6	21.3	7.7	21.3	—2.7
23	—1.2	22.6	7.3	22.6	*—3.0*
24	—0.9	22.8	9.2	23.5	—1.9
25	3.8	26.6	13.9	26.9	3.0
26	15.4	21.0	7.6	23.0	10.6
27	3.3	25.4	9.6	26.1	1.6
28	7.0	26.2	12.0	26.9	3.9
29	4.8	27.6	13.6	28.4	3.5
30	5.8	26.4	12.6	26.7	4.1
31	16.4	26.8	14.3	27.2	7.1
1–10	2.70	20.18	7.68	20.86	1.86
11–20	5.60	19.70	7.12	20.64	1.89
21–31	4.69	24.03	10.36	24.62	2.15
Promedio...	4.34	21.39	8.45	22.12	1.97

TEMPERATURA DEL AIRE EN CÓRDOBA

Setiembre, 1886

Tab. II, 9.

FECHA	7 a.	2 p.	9 p.	M	m
1	17.4	30.8	19.6	31.2	12.5
2	12.2	23.8	14.0	24.5	11.3
3	15.6	32.0	18.8	**32.5**	9.3
4	15.2	24.6	15.9	25.2	15.0
5	13.3	22.2	16.0	22.5	12.2
6	13.6	16.4	12.8	17.3	13.5
7	12.4	18 8	14.0	19.5	12.1
8	10.8	14.6	9.8	18.2	10.5
9	4.0	22.3	9.4	23.0	1.7
10	14.4	23.8	9.3	23.8	4.7
11	6.4	29.2	19.2	30.2	1.3
12	10.2	31.7	17.0	32.4	6.1
13	7.7	32.2	22.3	32.3	5.7
14	13.2	23.4	14.6	23.8	6.2
15	6.3	21.3	9.1	22.1	3.0
16	4.9	23.8	12.6	25.2	2.2
17	6.8	17.8	13.7	18.4	5.0
18	7.2	13.6	10.9	14.2	7.1
19	5.8	5.8	2.5	6.5	5.6
20	2.2	5.6	1.2	6.0	1.1
21	2.7	13.7	4.9	14.1	*—1.8*
22	1.6	20.8	9.4	21.4	—0.8
23	8.6	19.4	13.6	19.9	3.2
24	10.5	14.2	9.5	14.3	9.0
25	8.1	12.1	9.7	12.2	7.0
26	8.7	15.8	8.6	16.1	8.1
27	4.3	21.8	11.0	22.4	0.7
28	6.6	23.8	14.1	24.1	2.2
29	11.1	20.8	14.8	25.3	8.5
30	11.7	13.4	12.0	14.4	10.6
1–10	12.89	22.93	13.96	23.77	10.28
11–20	7.07	20.44	12.31	21.11	4.33
21–30	7.39	17.58	10.76	18.42	4.67
Promedio...	9.12	20.32	12.34	21.10	6.43

TEMPERATURA DEL AIRE EN CÓRDOBA

Octubre, 1886

Tab. II, 10.

FECHA	7 a.	2 p.	9 p.	M	m
1	11.1	13.5	10.2	14.6	10.0
2	11.0	20.2	13.8	20.7	9.0
3	15.5	24.0	18.4	24.5	8.8
4	7.0	16.4	7.5	17.6	5.9
5	5.6	18.8	8.8	19.2	1.7
6	10.6	23.2	12.3	23.7	4.0
7	11.8	27.6	15.5	28.3	5.5
8	14.2	27.2	16.8	27.6	8.8
9	13.0	26.6	15.2	26.9	9.1
10	14.6	25.1	13.4	25.6	9.5
11	11.6	24.8	13.9	25.1	6.1
12	15.5	24.7	14.0	25.0	9.1
13	11.0	18.5	12.7	19.1	10.7
14	15.0	23.7	15.0	25.0	11.3
15	13.7	26.0	18.0	26.3	7.6
16	15.4	28.1	18.5	28.8	9.2
17	19.6	34.4	20.4	**34.8**	12.1
18	12.4	22.0	12.3	22.2	11.5
19	13.5	21.3	17.5	23.0	9.8
20	17.8	28.8	14.2	29.2	15.4
21	13.8	23.0	12.0	23.3	6.8
22	17.2	28.0	17.2	28.3	8.1
23	18.3	24.3	13.9	25.4	11.1
24	14.3	22.2	11.5	25.1	10.8
25	10.7	27.2	15.5	27.5	4.1
26	15.1	28.7	20.8	30.1	7.4
27	13.8	23.9	15.4	24.8	12.0
28	17.2	28.3	20.8	28.9	10.4
29	12.8	20.6	14.8	21.9	12.4
30	16.2	22.0	14.7	22.4	13.1
31	13.4	26.8	17.8	27.2	7.9
1–10	11.44	22.26	13.19	22.87	7.23
11–20	14.55	25.23	15.65	25.85	10.28
21–31	14.80	25.00	15.85	25.90	9.46
Promedio...	13.64	24.19	14.93	24.91	9.01

TEMPERATURA DEL AIRE EN CÓRDOBA

Noviembre, 1886

Tab. II, 11.

FECHA	7 a.	2 p.	9 p.	M	m
1	15.0	29.1	19.4	29.5	9.0
2	18.1	26.7	19.6	31.2	13.7
3	16.8	31.6	24.0	**34.5**	11.2
4	17.0	30.7	22.8	31.7	15.6
5	16.6	20.7	15.8	20.9	16.0
6	18.2	21.8	17.3	22.5	13.7
7	14.8	24.6	16.5	24.6	13.6
8	16.8	29.3	20.5	29.7	12.4
9	20.3	15.4	16.0	29.4	15.3
10	11.0	15.0	10.6	16.1	11.5
11	9.0	12.4	11.2	14.5	8.4
12	11.1	17.6	15.0	17.8	10.1
13	14.0	25.6	15.7	25.8	12.0
14	18.6	28.7	19.4	29.2	8.3
15	18.4	33.8	24.9	**34.5**	13.3
16	17.8	26.5	16.0	27.2	17.1
17	15.0	30.2	17.9	30.6	*8.0*
18	15.4	31.6	20.8	32.1	9.0
19	22.9	33.4	23.6	**34.5**	17.5
20	20.4	24.5	18.7	32.3	15.5
21	20.4	28.2	21.6	28.7	16.8
22	20.5	26.6	15.2	29.2	15.5
23	16.6	25.2	17.3	26.1	15.0
24	20.2	28.6	19.6	28.8	12.6
25	18.6	25.8	16.8	26.6	14.1
26	16 6	29.8	19.0	31.1	10.2
27	21.9	27.5	16.6	29.0	15.0
28	16.9	27.2	19.0	28.2	15.2
29	14.6	19.6	15.4	20.4	13.5
30	14.7	25.2	15.2	25.7	8.2
1–10	16 46	24.49	18.25	27.01	13.20
11–20	16 26	26.43	18.32	27.85	11.92
21–30	18.10	26.37	17.57	27.38	13.61
Promedio...	16.94	25.76	18.05	27.41	12.91

TEMPERATURA DEL AIRE EN CÓRDOBA

Diciembre, 1886

Tab. II, 12.

FECHA	7 a.	2 p.	9 p.	M	m
1	15.8	29.6	18.2	30.2	7.3
2	16.6	30.2	17.8	30.5	9.1
3	20.8	31.7	17.8	32.2	12.6
4	16.8	31.4	21.2	31.5	10.1
5	24.4	34.0	23.7	34.7	13.8
6	23.6	37.3	25.6	37.9	18.5
7	16.0	22.2	13.8	22.7	15.1
8	16.6	27.7	18.6	27.7	8.7
9	20.1	30.5	21.8	31.0	13.8
10	22.0	33.8	28.0	33.9	17.0
11	26.2	21.6	20.6	33.4	21.6
12	20.9	32.8	22.4	32.9	14.0
13	22.8	34.9	24.8	**39.0**	15.5
14	20.6	30.5	22.8	31.0	18.8
15	19.0	33.1	23.5	33.1	14.8
16	20.0	35.7	25.2	35.9	14.6
17	22.7	35.6	24.4	35.8	16.5
18	24.9	36.5	19.0	36.9	15.4
19	19.4	33.2	26.3	34.3	16.5
20	21.6	36.8	26.8	37.6	18.0
21	19.8	32.0	21.3	32.1	17.6
22	21.4	36.5	25.2	36.6	14.2
23	23.3	22.5	19.6	25.9	18.3
24	19.8	33.0	22.8	33.5	16.3
25	21.8	25.0	19.7	35.5	16.4
26	22.9	36.8	26.2	37.8	15.8
27	23.5	19.4	15.2	32.1	18.6
28	15.6	23.8	14.8	24.2	11.6
29	16.7	28.3	17.7	28.7	10.6
30	21.1	33.0	21.0	33.5	9.5
31	20.6	13.0	14.0	23.8	13.1
1–10	19.27	30.84	20.65	31.23	12.60
11–20	21.81	33.07	23.58	34.99	16.57
21–31	20.59	27.57	19.77	31.25	14.73
Promedio....	20.56	30.40	21.28	32.45	14.64

TENSION DEL VAPOR ATMOSFÉRICO

CORDOBA, 1886

Tab. III, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	14.2	9.7	10.5	13.9	13.2	13.7	16.6	15.7	13.4
2	11.3	10.4	3.1	13.0	14.3	13.0	14.7	14.7	14.0
3	14.9	16.1	14.9	12.7	16.1	16.2	13.8	14.4	15.8
4	14.5	13 6	14.1	16.4	17.1	14.9	14.4	17.3	17.8
5	13.9	12.5	12.6	15.3	16.9	14.3	16.9	17.6	18.0
6	*7.8*	9.6	10.8	14.4	15.1	13.4	**19.1**	16.2	14.2
7	9.8	13.5	14.1	15.1	15.9	13.9	10.2	13.7	12.3
8	13.4	17.1	18.1	15.5	12.8	13.6	11.1	11.8	13.8
9	16.7	21.1.	18.8	14.7	16.9	16.5	12.3	14.6	12.8
10	20.0	19.9	16.7	16.9	17.0	17.4	11.8	14.5	14.3
11	16.6	19.3	18.6	17.2	18.4	16.4	14.4	9.7	11.3
12	18.7	20.6	**21.2**	16.0	15.7	16.7	12.9	12.0	15.0
13	21.1	20.5	16.5	10.3	*8.5*	10.3	14.6	15.5	15.2
14	15.5	18.6	20.2	9.3	8.6	10.0	13.1	14.3	14.1
15	18.2	19.0	18.9	9.7	10.2	10.9	12.5	11.7	11.4
16	15.2	17.4	19.6	10.2	11.3	12.2	9.6	11.8	13.2
17	16.0	16.3	16.3	13.4	13.2	13.6	9.2	13.0	13.6
18	15.5	15.6	17.1	10.8	12.5	11.6	13.1	14.1	12.2
19	12.3	11.0	10.9	10.0	9.4	10.6	9.8	*8.7*	10.4
20	11.5	11.8	12.7	13.0	13.1	12.6	8.8	9.1	11.2
21	12.9	16.2	14.2	14.4	16.2	15.6	12.5	13.4	13.8
22	12.9	16.3	14.6	14.8	16.3	16.8	12.5	12.3	12.4
23	13.5	15.4	17.3	15.6	15.1	16.3	12.3	12.3	11.7
24	17.6	15.2	15.2	16.8	**21.1**	16.9	10.7	13.4	11.8
25	11.7	13.2	14.5	15.9	17.6	19.0	10.6	11.3	10.8
26	14.5	14.0	15.4	16.6	18.1	17.4	10.3	12.2	12.9
27	13.4	14.7	16.3	15.3	16.8	17.9	11.6	11.3	11.8
28	15.3	16.4	16.9	16.7	17.1	19.0	11.0	11.1	11.1
29	17.0	17.7	13.0				10.5	12.4	11.4
30	14.8	15.0	15.6				10.0	13.8	13.3
31	14.6	14.7	14.1				11.1	13.3	12.5
1–10	13.6	14.4	14.4	14.8	15.5	14.7	14.1	15.1	14.6
11–20	16.1	17.0	17.2	12.0	12.1	12.5	11.8	12.0	12.8
21–31	14.4	15.3	15.2	15.8	17.3	17.4	11.2	12.4	12.1
Promedio.	14.69	15.56	15.57	14.07	14.80	14.67	12.32	13.14	13.13

TENSION DEL VAPOR ATMOSFÉRICO

CÓRDOBA, 1886

Tab. III, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	11.7	15.8	14.9	7.8	7.1	8.4	5.8	5.3	6.4
2	15.0	**18.5**	18.0	8.6	9.9	8.1	5.7	5.2	5.4
3	15.5	14.1	12.1	6.1	8.3	7.5	4.0	5.7	5.6
4	10.4	11.3	10.2	5.4	7.9	8.0	4.9	7.8	6.5
5	9.2	12.0	10.5	8.4	8.5	9.4	5.6	6.6	7.0
6	8.0	10.2	11.3	9.7	10.5	8.5	7.2	7.8	6.8
7	9.4	13.4	13.1	6.1	4.7	5.1	7.1	6.2	5.6
8	7.6	9.1	9.6	4.6	6.1	5.7	5.3	5.6	6.3
9	8.3	6.2	8.5	5.1	6.0	5.8	4.5	5.7	4.9
10	8.1	6.3	8.5	3.7	4.5	4.4	3.8	5.6	5.3
11	5.1	*4.3*	4.5	4.1	5.0	5.4	4.9	5.2	5.5
12	4.8	4.7	6.0	4.3	5.3	5.4	6.6	7.2	5.9
13	5.3	5.1	7.2	4.4	5.6	6.3	7.3	7.3	6.7
14	7.6	9.8	8.2	5.1	7.3	6.7	4.6	4.6	5.3
15	9.5	9.7	7.1	5.9	7.9	6.1	4.2	5.2	5.5
16	6.4	6.4	8.0	4.5	7.1	6.3	4.5	5.9	5.1
17	6.6	7.5	8.5	*3.6*	8.1	6.5	4.2	7.2	7.0
18	6.8	8.6	8.6	5.1	6.4	6.7	6.0	6.0	5.8
19	7.5	11.9	13.1	6.3	9.5	6.9	4.8	5.2	6.3
20	11.6	15.3	12.8	7.8	8.1	9.3	3.9	4.2	4.0
21	9.1	9.2	9.0	9.3	11.6	11.5	3.4	3.1	3.6
22	9.3	9.8	9.2	12.0	5.9	5.1	2.8	*2.5*	3.5
23	8.7	9.2	8.3	3.7	4.3	4.0	3.5	5.3	4.9
24	6.5	8.7	8.6	*3.6*	5.1	5.2	3.9	6.0	6.5
25	6.0	9.8	8.1	4.4	13.5	5.7	5.5	6.0	8.2
26	8.0	9.2	8.0	5.2	8.1	6.5	8.8	**10.2**	9.8
27	7.2	9.0	9.7	5.0	8.5	9.1	8.0	8.4	8.3
28	7.3	9.3	9.8	7.3	8.3	10.9	5.3	4.1	4.8
29	7.6	9.8	10.1	9.0	3.0	12.3	4.7	4.1	4.1
30	8.6	8.6	8.3	**13.9**	13.4	11.1	4.7	3.7	5.1
31				8.7	7.8	6.9			
1–10	10.3	11.7	11.7	6.5	7.4	7.1	5.4	6.2	6.0
11–20	7.1	8.3	8.4	5.1	7.0	6.6	5.1	5.8	5.7
21–31	7.8	9.3	8.9	7.5	9.0	8.0	5.1	5.3	5.9
Promedio.	8.42	9.76	9.66	6.41	7.85	7.25	5.18	5.76	5.86

TENSION DEL VAPOR ATMOSFÉRICO

CÓRDOBA, 1886

Tab. III, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	4.8	3.7	3.9	6.8	3.0	4.0	6.7	8.5	5.3
2	4.1	4.3	4.2	3.6	5.4	3.5	6.0	6.4	6.3
3	3.8	4.4	4.3	3.3	3.1	3.8	8.5	9.7	9.3
4	4.0	5.6	4.7	3.6	4.3	4.7	9.3	10.1	10.7
5	4.6	4.4	3.9	3.9	3.1	4.8	6.9	9.2	10.1
6	4.6	4.9	4.7	4.5	4.6	4.4	9.5	10.4	10.4
7	4.5	6.7	6.1	4.3	4.7	5.2	9.7	9.5	9.8
8	4.1	2.8	2.7	5.0	4.1	5.6	8.6	9.1	8.0
9	1.7	2.0	1.7	4.3	3.8	3.3	5.6	6.9	5.4
10	1.4	1.9	2.9	3.3	3.7	4.4	6.0	6.9	6.3
11	2.3	*1.0*	2.9	4.2	5.5	6.6	4.9	7.3	6.3
12	2.6	4.0	2.9	3.7	3.6	3.2	6.7	6.5	6.9
13	3.1	3.1	2.9	4.2	4.8	4.0	5.6	6.7	6.5
14	2.7	3.2	4.3	2.6	3.1	2.7	4.9	4.1	4.4
15	3.8	4.8	4.3	*2.3*	2.8	3.9	*4.0*	6.4	5.6
16	3.7	5.1	4.9	3.4	5.1	5.6	4.6	7.1	5.4
17	5.4	5.8	5.6	6.2	4.1	3.5	6.3	5.6	5.4
18	5.5	6.5	6.8	3.5	2.7	3.0	5.6	4.8	5.4
19	5.6	6.6	7.4	3.2	2.4	2.9	6.3	6.7	5.3
20	5.8	7.8	6.9	3.4	4.9	4.2	5.3	5.4	4.3
21	6.8	4.6	5.0	3.7	3.7	4.4	4.1	6.2	5.9
22	5.7	5.1	5.6	3.4	3.0	3.7	4.9	7.2	6.7
23	4.8	8.0	6.7	3.0	3.0	4.3	6.5	7.8	8.7
24	9.4	**10.9**	9.7	3.6	4.6	4.8	6.5	6.4	7.1
25	7.0	7.0	6.1	5.0	6.6	**8.2**	7.3	6.5	6.4
26	5.0	7.1	6.6	4.7	5.3	4.0	6.0	5.9	5.4
27	9.1	9.7	10.7	4.0	5.5	4.8	5.3	7.2	6.6
28	3.3	3.3	3.9	5.6	6.3	7.5	6.4	7.1	7.9
29	4.4	2.7	3.6	5.6	6.0	6.0	7.9	**10.9**	9.8
30	3.7	7.7	8.5	5.4	7.0	6.8	9.6	10.4	9.7
31	5,9	7.5	6.4	6.2	7.2	6.8			
1-10	3.8	4.1	3.9	4.3	4.0	4.4	7.7	8.7	8.2
11-20	4.0	4.8	4.9	3.7	3.9	4.0	5.4	6.1	5.5
21-31	5.9	6.7	6.6	4.6	5.3	5.6	6.4	7.6	7.4
Promedio.	4.62	5.23	5.19	4.18	4.42	4.66	6.51	7.43	7.04

TENSION DEL VAPOR ATMOSFÉRICO

CÓRDOBA, 1886

Tab. III, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	9.5	10.2	8.9	8.9	10.2	9.2	8.1	7.5	8.4
2	9.3	10.9	10.7	10.8	12.1	12.8	9.0	6.4	9.2
3	10.2	12.6	12.7	11.0	11.1	11.1	8.6	9.2	8.8
4	7.3	6.8	6.9	11.5	7.7	10.3	10.0	10.1	10.9
5	*5.0*	5.7	7.2	12.9	12.6	12.2	10.5	11.0	11.3
6	5.5	6.7	7.2	11.6	13.8	11.9	12.6	11.5	9.8
7	7.1	9.5	9.0	11.4	13.4	12.2	8.3	*5.6*	9.5
8	7.7	9.6	9.4	12.5	13.6	14.1	8.7	9.3	10.8
9	9.3	7.8	8.5	14.6	13.0	11.4	9.9	10.6	13.0
10	8.5	8.0	8.0	9.0	8.9	7.6	14.5	15.4	**18.2**
11	7.5	6.9	7.4	6.7	7.7	8.0	17.2	16.7	14.4
12	6.6	7.6	8.2	7.9	8.4	9.7	14.9	13.4	12.5
13	9.0	9.7	9.4	10.3	10.7	10.3	15.0	13.5	15.1
14	9.4	10.0	9.6	9.7	7.9	8.9	15.5	14.8	12.4
15	10.2	10.0	8.1	10.6	11.3	12.2	13.2	14.1	13.8
16	10.2	12.4	10.3	*5.4*	7.3	8.2	13.8	12.9	11.4
17	11.3	12.0	11.0	7.9	7.7	8.9	12.0	7.8	10.0
18	8.2	8.2	8.3	8.6	6.6	6.6	11.3	8.3	13.4
19	8.8	9.9	9.5	8.7	10.5	9.6	13.9	14.2	14.0
20	10.4	**14.4**	7.6	10.8	12.3	**15.5**	14.3	12.4	13.2
21	6.4	7.8	7.4	12.6	14.8	15.2	15.4	13.5	11.8
22	7.1	9.1	11.6	14.8	13.7	12.6	12.7	10.0	12.9
23	9.6	9.7	7.3	13.2	14.2	12.7	14.0	17.6	15.8
24	9.1	7.9	6.6	11.9	11.4	13.1	15.5	11.1	11.2
25	6.6	7.3	8.6	10.8	10.7	10.8	13.3	9.8	12.2
26	7.8	9.4	9.2	10.3	10.9	10.7	12.4	8.4	9.9
27	10.2	9.5	10.2	9.1	11.5	10.9	12.9	14.5	11.2
28	10.2	9.4	9.7	12.4	11.6	12.3	8.1	8.1	9.1
29	10.0	11.4	10.7	10.7	9.9	9.7	9.5	6.8	8.6
30	11.1	11.8	10.7	9.3	6.2	8.3	8.1	8.7	8.8
31	9.9	12.2	10.6				9.6	10.6	10.3
1–10	7.9	8.8	8.9	11.4	11.6	11.3	10.0	9.7	11.0
11–20	9.2	10.1	8.9	8.7	9.0	9.8	14.1	12.8	13.0
21–31	8.9	9.6	9.3	11.5	11.5	11.6	12.0	10.8	11.1
Promedio.	8.68	9.50	9.05	10.53	10.72	10.90	12.03	11.09	11.67

HUMEDAD RELATIVA

CÓRDOBA, 1886

Tab. IV, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	77	*30*	60	66	46	66	93	72	88
2	63	33	57	75	70	75	96	81	87
3	94	72	86	81	67	82	95	56	81
4	92	47	69	91	59	95	94	46	84
5	82	35	56	96	58	67	93	51	74
6	39	*30*	58	89	55	61	90	78	88
7	61	40	64	88	74	69	94	46	80
8	65	89	96	96	48	76	96	35	75
9	96	63	79	86	78	87	87	36	55
10	79	48	74	93	49	84	73	43	61
11	98	78	92	91	55	88	89	*25*	52
12	91	55	83	100	74	90	86	29	79
13	90	50	100	83	45	82	88	53	83
14	88	60	90	89	42	77	78	54	83
15	93	55	80	85	54	75	100	67	90
16	85	60	82	87	37	68	96	38	87
17	100	77	93	99	61	71	93	49	86
18	93	54	86	85	42	64	87	47	89
19	79	44	71	87	*29*	58	86	42	90
20	89	42	73	77	38	60	95	42	76
21	80	50	68	66	78	73	91	87	96
22	75	54	63	80	54	83	96	87	98
23	82	44	69	89	37	69	97	75	86
24	85	91	89	87	83	96	94	64	90
25	75	50	77	92	61	95	95	59	90
26	89	54	85	98	69	91	96	53	75
27	88	53	84	96	49	84	91	50	75
28	87	52	81	93	46	76	91	56	73
29	90	80	92				92	51	85
30	89	54	84				94	52	79
31	93	45	71				94	48	81
1–10	74.8	48.7	69.9	86.1	60.4	76.2	91.1	54.4	77.3
11–20	90.6	57.5	85.0	88.3	47.7	73.3	89.8	44.6	81.5
21–31	84.8	57.0	78.5	.87.6	59.6	83.4	93.7	62.0	84.4
Promedio.	83.5	54.5	77.8	87.3	55.6	77.2	91.6	53.9	81.2

HUMEDAD RELATIVA

CÓRDOBA, 1886

Tab. IV, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	92	58	82	88	32	69	95	47	91
2	95	69	88	89	50	64	90	39	87
3	87	87	78	92	41	62	92	37	71
4	80	79	84	93	41	85	96	46	88
5	94	55	79	89	39	69	83	58	88
6	93	36	84	94	49	71	89	88	83
7	95	42	85	94	30	72	93	84	84
8	52	36	63	92	30	76	84	61	83
9	81	36	75	96	33	69	92	45	88
10	82	40	72	54	29	80	96	46	82
11	69	34	71	80	28	74	79	40	74
12	85	42	67	92	28	58	97	54	55
13	61	35	66	96	39	64	76	69	83
14	72	48	68	96	37	77	78	36	84
15	81	40	70	92	44	82	96	34	76
16	93	*21*	69	96	38	79	96	39	84
17	90	24	63	94	39	79	96	55	75
18	89	26	70	96	30	59	81	65	93
19	91	36	80	91	39	75	98	37	71
20	83	29	90	80	47	75	51	40	82
21	91	87	89	86	44	85	100	27	78
22	94	93	94	93	48	58	100	*16*	65
23	90	73	83	86	30	78	100	31	80
24	97	62	87	88	*25*	60	96	31	68
25	98	55	82	92	56	66	100	26	77
26	92	45	87	93	31	71	87	49	81
27	98	47	73	95	26	67	71	43	72
28	94	47	76	94	*25*	64	54	31	55
29	91	51	75	92	45	80	82	36	74
30	82	53	81	99	87	94	83	34	64
31				95	76	79			
1-10	85.1	53.8	79.0	88.1	37.4	71.7	91.0	55.1	84.5
11-20	81.4	33.5	71.4	91.3	36.9	72.2	84.8	46.9	77.7
21-31	92.7	61.3	82.7	92.1	44.8	72.9	87.3	32.4	71.4
Promedio.	86.4	49.5	77.7	90.5	39.9	72.3	87.7	44.8	77.9

HUMEDAD RELATIVA

CÓRDOBA, 1886

Tab. IV, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	78	24	53	76	21	62	45	26	31
2	80	30	66	84	28	44	56	29	53
3	90	29	70	78	19	47	64	27	57
4	90	29	76	83	23	64	72	45	80
5	80	23	66	88	18	60	61	47	75
6	92	34	74	80	32	68	82	75	95
7	96	45	84	92	27	71	91	59	82
8	53	31	39	57	18	41	90	74	88
9	72	23	91	45	22	50	92	35	61
10	66	16	66	80	17	57	49	31	72
11	96	*9*	50	64	23	58	68	24	39
12	93	27	62	38	25	49	72	*18*	48
13	93	20	48	75	24	50	71	*18*	33
14	88	18	51	43	22	48	43	19	36
15	78	25	67	25	19	51	56	34	65
16	94	33	70	84	18	55	70	32	49
17	80	36	66	40	26	53	85	36	46
18	78	34	67	79	18	37	74	41	55
19	87	26	62	46	17	42	91	97	96
20	90	34	75	63	34	70	96	80	85
21	68	29	69	88	25	62	74	53	92
22	78	36	67	84	16	47	94	40	76
23	85	41	78	73	*15*	57	78	47	75
24	93	48	76	84	22	56	69	53	80
25	84	36	71	83	26	69	91	62	71
26	87	34	50	36	28	51	72	44	65
27	88	31	64	70	23	54	85	37	68
28	32	29	60	75	25	72	88	32	66
29	77	16	49	87	22	52	80	60	78
30	51	31	73	79	28	62	95	91	94
31	96	39	52	44	28	56			
1–10	79.7	28.4	68.5	76.3	22.5	56.4	70.2	44.8	69.4
11–20	87.7	26.2	61.8	55.7	22.6	51.3	72.6	39.9	55.2
21–31	76.3	33.6	64.5	73.0	23.5	58.0	82.6	51.9	76.5
Promedio.	81.1	29.5	64.9	68.5	22.9	55.3	75.1	45.5	67.0

HUMEDAD RELATIVA

CÓRDOBA, 1886

Tab. IV, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	96	89	96	70	34	55	61	24	54
2	95	62	92	70	47	76	64	20	61
3	78	57	80	77	32	50	47	27	58
4	98	49	89	80	23	50	70	29	59
5	74	36	86	92	70	91	47	28	52
6	58	32	67	75	72	81	58	24	41
7	69	35	68	91	58	87	61	28	81
8	64	36	66	88	45	79	62	34	68
9	85	30	66	83	100	84	56	33	67
10	69	34	70	92	70	80	74	40	65
11	74	30	62	78	72	80	68	87	80
12	50	33	69	80	56	76	81	36	63
13	92	61	87	87	44	78	73	33	65
14	74	46	75	60	27	53	86	46	60
15	88	41	53	67	29	53	81	37	64
16	79	44	64	35	29	60	79	29	48
17	67	30	62	62	24	58	59	*18*	45
18	77	42	78	66	*18*	36	48	*18*	82
19	76	53	64	42	27	44	83	38	56
20	68	49	63	61	54	97	75	27	50
21	55	38	71	71	52	80	90	38	63
22	48	32	80	83	54	98	67	21	55
23	61	43	61	94	60	87	66	87	93
24	75	40	65	67	39	78	90	30	54
25	69	*27*	65	68	44	76	69	42	71
26	61	32	50	73	35	65	60	*18*	40
27	87	43	79	46	42	77	60	87	87
28	70	33	53	87	43	75	61	36	73
29	91	58	86	87	58	75	67	24	57
30	81	60	86	75	26	64	44	23	47
31	87	47	69				53	96	87
1–10	78.6	46.0	78.0	81.8	55.1	73.3	60.0	28.7	60.6
11–20	74.5	42.9	67.7	63.8	38.0	63.5	73.3	36.9	61.3
21–31	71.4	41.2	69.5	75.1	45.3	77.5	66.1	45.6	66.1
Promedio.	74.7	43.3	71.7	73.6	46.1	71.4	66.4	37.4	62.8

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1886

Enero

Tab. V, 1.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	1.1	3.2	1.8	6.1	0.8	0.9	1.4	3.1
2	0.2	4.2	3.4	**7.8**	0.2	1.3	1.6	3.1
3	0.6	0.5	1.4	2.5	0.5	0.2	0.6	1.3
4	0.1	2.7	1.8	4.6	0.1	0.8	1.1	2.0
5	0.1	4.4	3.0	7.5	0.1	1.6	1.8	3.5
6	1.1	4.2	1.8	7.1	1.0	1.8	1.3	**4.1**
7	0.2	3.9	2.5	6.6	0.2	1.3	1.5	3.0
8	0.3	2.0	0	2.3	0.3	0.9	0	1.2
9	0	2.7	1.8	4.5	0	0.9	1.0	1.9
10	0.6	4.8	2.1	7.5	0.3	1.4	1.4	3.1
11	0.2	0.6	0.9	1.7	0.2	0.4	0.6	1.2
12	0	2.7	1.5	4.2	0.2	0.9	0.9	2.0
13	0	3.7	0.9	4.6	0.2	1.2	0.6	2.0
14	0	2.5	1.2	3.7	0	0.8	0.6	1.4
15	0.1	2.9	1.1	4.1	0.1	0.9	0.8	1.8
16	0.2	1.5	0.6	2.3	0.2	0.4	0.5	1.1
17	0.2	0.5	0.6	*1.3*	0.2	0.3	0.6	1.1
18	0	1.8	1.6	3.4	0.1	0.7	0.9	1.7
19	0.4	2.4	1.2	4.0	0.2	0.7	1.0	1.9
20	0	2.3	1.2	3.5	0.1	0.6	1.0	1.7
21	0.2	3.2	1.8	5.2	0.2	1.2	1.2	2.6
22	0.2	2.4	1.2	3.8	0.2	0.8	1.0	2.0
23	0.1	2.9	2.0	5.0	0.4	0.6	1.3	2.3
24	0.3	0.5	0.5	*1.3*	0.2	0.4	0.4	1.0
25	0.2	2.4	0.7	3.3	0.2	0.4	0.6	1.2
26	0	1.9	1.0	2.9	0.1	0.7	0.4	1.2
27	0.1	1.3	0.3	1.7	0.1	0.5	0.2	*0.8*
28	0.1	0.8	0.9	1.8	0.1	0.5	0.7	1.3
29	0.2	1.4	0.8	2.4	0.1	0.5	0.2	*0.8*
30	0.3	2.1	1.4	3.8	0.3	0.8	1.0	2.1
31	0	3.1	1.2	4.3	0.2	0.8	0.8	1.8
Suma.	7.1	75.5	4.22	124.8	7.1	25.2	27.0	59.3

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1886

Febrero

Tab. V, 2.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.2	3.6	1.0	4.8	0.3	1.4	0.8	2.5
2	0.6	1.3	0.6	2.5	0.3	0.6	0.3	1.2
3	0.1	1.9	1.0	3.0	0.1	0.6	0.6	1.3
4	0.2	1.6	0.9	2.7	0.2	0.5	0.6	1.3
5	0	2.1	1.7	3.8	0	0.6	1.1	1.7
6	0.2	2.2	1.5	3.9	0.2	0.6	1.0	1.8
7	0.2	0.4	0.8	1.4	0.3	0.2	0.6	1.1
8	0.2	1.9	1.3	3.4	0.2	0.6	1.2	2.0
9	0.1	0.5	0.7	1.3	0.1	0.3	0.2	*0.6*
10	0.1	3.3	3.1	6.5	0.1	1.1	1.0	2.2
11	0	3.0	2.0	5.0	0	0.8	1.2	2.0
12	0.3	0.3	0.6	*1.2*	0.3	0.2	0.4	0.9
13	0.2	2.8	1.3	4.3	0.2	0.9	0.6	1.7
14	0.1	2.8	1.1	4.0	0.1	0.6	0.6	1.3
15	0	1.6	1.5	3.1	0	0.5	0.6	1.1
16	0.2	3.7	1.8	5.7	0.2	0.9	0.9	2.0
17	0.2	1.3	1.2	2.7	0.2	0.3	0.5	1.0
18	0.4	3.7	1.9	6.0	0.2	0.9	1.1	2.2
19	0.3	4.0	3.2	**7.5**	0.2	1.4	1.8	3.4
20	0.8	3.0	3.5	7.3	0.6	1.3	1.7	**3.6**
21	0.4	1.0	0.7	2.1	0.4	0.6	0.3	1.3
22	0.4	4.3	1.6	6.3	0	1.2	0.8	2.0
23	0	3.4	3.0	6.4	0.1	1.1	1.8	3.0
24	0.2	1.2	2.6	4.0	0.2	0.6	1.2	2.0
25	0	2.8	0.7	3.5	0.1	0.6	0.5	1.2
26	0	2.0	1.0	3.0	0.1	0.5	0.4	1.0
27	0	2.8	1.4	4.2	0	0.7	0.6	1.3
28	0	4.2	2.8	7.0	0.2	1.2	1.3	2.7
Suma.	5.4	66.7	44.5	116.6	4.9	20.8	23.7	49.4

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Marzo

Tab. V, 3.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0	0.5	0.7	1.2	0	0.4	0.4	0.8
2	0	0.1	0.2	0.3	0	0.1	0.2	0.3
3	0	1.5	2.1	3.6	0.1	0.4	1.0	1.5
4	0.2	3.3	2.1	5.6	0.2	0.8	1.3	2.3
5	0.1	3.7	2.9	6.7	0.1	1.2	1.6	2.9
6	0.7	0.9	0.8	2.4	0.4	0.6	0.4	1.4
7	0	3.1	2.3	5.4	0	0.8	1.1	1.9
8	0	4.0	3.1	7.1	0	1.2	1.4	2.6
9	0.2	4.0	2.2	6.4	0.2	1.0	1.4	2.6
10	0.4	3.3	1.8	5.5	0.4	0.9	1.0	2.3
11	0.2	5.3	2.3	7.8	0.2	1.2	1.4	2.8
12	0.3	5.4	4.4	**10.1**	0.2	1.7	1.8	**3.7**
13	0.5	3.8	2.2	6.5	0.2	0.5	1.0	1.7
14	0.2	1.0	1.3	2.5	0.2	0.3	0.5	1.0
15	0	0.3	1.3	1.6	0	0.2	0.6	0.8
16	0	2.7	1.9	4.6	0	0.8	0.8	1.6
17	0.1	2.5	1.4	4.0	0.1	0.6	0.6	1.3
18	0	3.5	2.3	5.8	0	1.2	1.2	2.4
19	0.2	2.2	1.4	3.8	0.2	1.0	0.5	1.7
20	0.1	2.8	1.6	4.5	0.1	0.9	0.8	1.8
21	0.1	0.2	0	0.3	0.1	0.1	0	0.2
22	0	0.1	0	*0.1*	0	0.1	0	*0.1*
23	0.2	1.1	0.6	1.9	0.2	0.3	0.2	0.7
24	0.1	2.1	1.7	3.9	0.1	0.3	0.5	0.9
25	0	1.7	1.3	3.0	0	0.4	0.4	0.8
26	0.1	2.7	1.5	4.3	0.1	0.7	0.6	1.4
27	0.4	2.3	0.5	3.2	0.3	0.7	0.5	1.5
28	0.2	1.3	0.5	2.0	0.2	0.4	0.5	1.1
29	0.1	2.6	1.1	3.8	0.1	0.5	0.5	1.1
30	0.2	3.1	1.4	4.7	0.1	0.5	0.7	1.3
31	0.2	2.5	1.8	4.5	0.2	0.8	1.0	2.0
Suma.	4.8	73.6	48.7	127.1	4.0	20.6	23.9	48.5

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Abril

Tab. V, 4.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0	2.0	1.6	3.6	0.1	0.7	0.8	1.6
2	0	2.7	1.0	3.7	0.1	0.7	0.5	1.3
3	0.2	0.2	0.2	0.6	0.2	0.2	0.1	0.5
4	0.3	0.2	0.2	0.7	0.3	0.2	0.2	0.7
5	0.1	2.0	1.2	3.3	0.1	0.5	0.6	1.2
6	0	2.3	1.4	3.7	0.1	0.6	0.6	1 3
7	0	3.2	1.7	4.9	0	0.9	1.0	1.9
8	1.3	3.7	1.2	6.2	1.0	0.9	0.7	2.6
9	0.4	0.9	0.7	2.0	0.4	0.4	0.5	1.3
10	0.1	1.4	0.8	2.3	0.1	0.7	0.5	1.3
11	0.5	2.3	0.8	3.6	0.5	0.7	0.4	1.6
12	0.1	1.0	0.8	1.9	0.1	0.5	0.4	1.0
13	0.1	1.7	1.0	2.8	0.1	0.7	0.4	1.2
14	0.2	1.2	1.5	2.9	0.2	0.5	0.6	1.3
15	0.1	2.2	1.1	3.4	0.1	0.5	0.8	1.4
16	0.1	3.3	1.6	5.0	0.1	1.2	1.0	2.3
17	0.1	3.7	2.2	6.0	0.1	1.5	1.2	2.8
18	0.2	3.8	2.5	**6.5**	0.2	1.6	1.4	**3.2**
19	0.1	3.7	1.2	5.0	0.1	1.8	0.7	2.6
20	0.2	2.2	1.1	3.5	0.2	0.8	0.5	1.5
21	0.1	0.1	0	0.2	0.1	0.1	0	0.2
22	0	0	0	*0.0*	0	0	0	*0.0*
23	0.1	0.6	0.4	1.1	0.1	0.3	0.4	0.8
24	0.2	1.2	0.6	2.0	0.3	0.4	0.2	0.9
25	0	1.4	0.7	2.1	0	0.4	0.4	0.8
26	0.1	1.8	0.6	2.5	0.1	0.3	0.4	0.8
27	0	0.3	1.0	1.3	0	0.2	0.7	0.9
28	0.1	1.6	0.5	2.2	0.1	0.5	0.5	1.1
29	0	1.6	0.8	2.4	0.1	0.5	0.6	1.2
30	0.4	1.7	1.0	3.1	0.4	0.7	0.6	1.7
Suma.	5.1	54.0	29.4	88.5	5.3	19.0	16.7	41.0

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Mayo

Tab. V, 5.

FECHA	LIBRE				À LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.3	2.4	1.4	4.1	0.3	1.0	0.9	2.2
2	0.2	1.9	0.9	3.0	0.2	0.6	0.8	1.6
3	0.2	2.2	0.8	3.2	0.2	0.6	0.6	1.4
4	0.1	2.3	1.2	3.6	0.1	0.8	0.8	1.7
5	0.6	3.6	1.8	6.0	0.5	1.4	1.3	**3.2**
6	0.2	1.8	1.1	3.1	0.2	0.5	0.6	1.3
7	0.4	2.4	1.0	3.8	0.3	1.0	0.8	2.1
8	0	2.2	1.1	3.3	0	0.6	0.8	1.4
9	0.1	3.0	1.2	4.3	0.1	1.3	1.0	2.4
10	0.1	2.3	0.5	2.9	0.1	0.9	0.4	1.4
11	0.2	2.7	0.8	3.7	0.2	0.7	0.6	1.5
12	0.1	3.1	1.9	5.1	0.1	1.3	1.6	2.4
13	0.1	1.4	0.7	2.2	0.1	0.5	0.7	1.3
14	0.1	2.3	1.0	3.4	0.2	0.7	0.8	1.7
15	0	1.2	0.6	1.8	0	0.6	0.4	1.0
16	0	3.5	1.6	5.1	0	0 9	0.8	1.7
17	0	2.2	1.0	3.2	0	0.8	0.6	1.4
18	0	3.7	2.5	6.2	0	1.4	1.4	2.8
19	0.6	2.4	1.6	4.6	0.5	0.8	0.8	2.1
20	0.1	2.2	1.1	3.4	0.1	0.8	0.5	1.4
21	0.2	2.0	1.5	3.7	0.2	0.8	0.7	1.7
22	0.2	0.4	1.3	1.9	0.2	0.4	1.2	1.8
23	0.6	2.9	1.0	4.5	0.4	0.8	0.6	1.8
24	0.1	3.3	2.0	5.4	0.1	0.9	1.3	2.3
25	0	2.7	2.0	4.7	0	1.0	1.2	2.2
26	0.1	3.3	2.2	5.6	0.1	1.1	1.1	2.3
27	0	3.8	3.0	6.8	0	1.4	1.4	2.8
28	0.1	4.6	2.7	**7.4**	0.1	1.3	1.4	2.8
29	0.3	3.6	2.4	6.3	0.3	0.7	1.6	2.6
30	0	0.1	0.2	*0.3*	0	0	0.2	*0.2*
31	0	0.7	0	0.7	0	0.6	0	0.6
Suma.	5.0	76.2	42.1	123.3	4.6	26.2	26.3	57.1

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Junio

Tab. V, 6.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.4	2.6	0.4	3.4	0.4	1.1	0.4	1.9
2	0.2	2.1	0.9	3.2	0.2	1.0	0.7	1.9
3	0.1	2.9	1.7	4.7	0.1	0.9	1.2	2.2
4	0	3.6	1.0	4.6	0	0.8	0.6	1.4
5	0	0.9	0.4	1.3	0	0.3	0.4	0.7
6	0	0.3	0.1	*0.4*	0	0.2	0.1	*0.3*
7	0	0.2	0.2	*0.4*	0.1	0.2	0.2	0.5
8	0.2	0.8	0.3	1.3	0.2	0.4	0.3	0.9
9	0.1	1.9	1.0	3.0	0.1	0.6	0.5	1.2
10	0.1	1.2	0.8	2.1	0.1	0.5	0.6	1.2
11	0	3.0	1.4	4.4	0	1.1	1.0	2.1
12	0.2	1.7	0.8	2.7	0.2	0.4	0.5	1.1
13	0.1	0.5	0.2	0.8	0.1	0.3	0.2	0.6
14	0.2	2.1	1.0	3.3	0.2	0.8	0.7	1.7
15	0	1.9	0.9	2.8	0	0.8	0.8	1.6
16	0.1	1.9	0.8	2.8	0.1	0.7	0.4	1.2
17	0	1.2	1.0	2.2	0	0.4	0.6	1.0
18	0.1	0.4	0.4	0.9	0.1	0.3	0.1	0.5
19	0	2.2	1.8	4.0	0	0.9	0.9	1.8
20	1.0	1.7	0.9	3.6	0.9	0.7	0.6	2.2
21	0.1	1.4	0.9	2.4	0.1	0.4	0.7	1.2
22	0.2	1.6	1.8	3.6	0.2	0.5	1.0	1.7
23	0.1	1.6	0.9	2.6	0.1	0.6	0.9	1.6
24	0.1	3.1	2.4	5.6	0.1	1.1	1.4	2.6
25	0.1	3.3	2.8	**6.2**	0.1	1.4	1.6	**3.1**
26	0.3	1.8	1.3	3.4	0.3	1.2	0.7	2.2
27	0.8	1.9	1.3	4.0	0.6	0.8	1.1	2.5
28	0.9	2.2	1.3	4.4	0.7	1.3	1.1	**3.1**
29	0.3	1.1	0.8	2.2	0.3	0.4	0.6	1.3
30	0.2	1.0	0.8	2.0	0.2	0.5	0.8	1.5
Suma.	5.9	52.1	30.3	88.3	5.5	20.6	20.7	46.8

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Julio

Tab. V, 7.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.2	2.3	1.9	4.4	0.2	1.0	1.3	2.5
2	0.2	2.8	1.0	4.0	0.2	0.9	0.8	1.9
3	0.2	1.8	1.4	3.4	0.2	0.8	1.0	2.0
4	0.1	2.7	1.6	4.4	0.1	1.3	1.0	2.4
5	0	3.3	1.4	4.7	0	1.5	0.9	2.4
6	0.1	3.1	1.1	4.4	0.1	1.3	0.9	2.3
7	0.1	1.6	1.2	2.9	0.1	0.6	0.8	*1.5*
8	0.4	2.3	2.1	4.8	0.4	1.4	1.2	2.3
9	0.3	1.4	0.8	*2.5*	0.3	0.7	0.5	*1.5*
10	0.2	1.4	1.7	3.3	0.2	0.8	1.1	2.1
11	0.4	1.0	2.4	3.8	0.4	0.6	1.4	2.4
12	0.2	1.6	1.2	3.0	0.2	0.9	0.6	1.7
13	0.2	2.4	2.1	4.7	0.2	1.2	1.2	2.6
14	0.2	2.6	3.3	6.1	0.2	1.2	1.7	3.1
15	0.4	3.1	1.5	5.0	0.4	1.4	1.2	3.0
16	0.1	2.3	1.6	4.0	0.1	0.0	1.2	2.3
17	0.2	3.5	2.8	6.5	0.2	1.9	1.4	3.5
18	1.6	2.5	2.6	6.7	1.2	1.0	1.8	4.0
19	0.8	2.6	2.9	6.3	0.7	1.2	1.6	3.5
20	0.1	2.0	1.5	3.6	0.1	0.6	0.9	1.6
21	0.4	2.0	1.3	3.7	0.3	1.5	0.8	2.6
22	0.2	2.5	1.2	3.9	0.2	1.4	1.0	2.6
23	0.1	1.8	1.4	3.3	0.2	0.6	0.8	1.6
24	0	2.0	1.0	3.0	0	0.8	0.8	1.6
25	0.4	2.9	1.4	4.7	0.4	1.1	1.1	2.6
26	0.1	3.2	2.5	5.8	0.1	1.5	1.7	3.3
27	0.8	3.5	3.0	**7.3**	0.5	1.6	1.8	3.9
28	2.9	2.9	0.9	6.7	2.1	1.8	0.6	**4.5**
29	0.2	3.2	2.3	5.7	0.2	1.6	1.6	3.4
30	0.7	3.4	2.5	6.6	0.6	1.6	1.6	3.8
31	0.1	2.5	2.2	4.8	0.1	1.3	1.6	3.0
Suma.	11.9	76.2	55.8	143.9	10.2	36.1	35.9	82.2

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Agosto

Tab. V, 8.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.8	2.6	1.4	4.8	0.6	1.6	1.2	3.4
2	0	1.9	1.6	*3.5*	0	0.6	1.2	*1.8*
3	0.3	2.9	2.7	5.9	0.3	1.1	1.6	3.0
4	0.3	2.3	2.2	4.8	0.2	1.1	1.6	2.9
5	0	4.4	3.4	7.8	0	2.2	2.0	4.2
6	0.4	3.2	2.0	5.6	0.3	1.4	1.3	3.0
7	0	3.5	2.1	5.6	0	1.6	1.5	3.1
8	0.5	4.8	3.5	8.8	0.5	2.7	2.3	5.5
9	3.6	3.7	1.5	8.8	2.4	1.9	1.1	5.4
10	0.2	3.5	2.2	5.9	0.2	1.5	1.7	3.4
11	0	4.3	2.4	6.7	0	2.0	1.7	3.7
12	2.0	3.6	1.4	7.0	1.4	2.0	1.0	4.4
13	0.2	3.6	2.0	5.8	0.2	1.9	1.7	3.8
14	1.8	3.1	1.4	6.3	1.2	1.3	0.9	3.4
15	0.5	5.2	3.0	8.7	0.5	2.4	1.8	4.7
16	0.3	3.6	3.3	7.2	0.2	1.9	2.1	4.2
17	2.2	3.9	1.8	7.9	2.1	2.1	1.4	5.6
18	0.2	3.5	3.0	6.7	0.2	1.7	1.8	3.7
19	1.1	4.5	2.0	7.6	1.0	2.3	1.5	4.8
20	0.5	1.9	1.4	3.8	0.4	0.6	0.8	*1.8*
21	0.2	2.7	1.8	4.7	0.2	1.4	1.1	2.7
22	0.1	4.1	4.0	8.2	0.1	2.1	2.1	4.3
23	0.2	4.8	3.4	8.4	0.2	2.7	2.0	4.9
24	0.4	4.6	3.5	8.5	0.4	2.1	2.0	4.5
25	0.2	4.6	2.7	7.5	0.2	2.1	1.7	4.0
26	0.8	5.0	1.3	7.1	0.6	2.6	1.3	4.5
27	0.2	4.2	3.0	7.4	0.2	2.2	1.9	4.3
28	0.3	3.9	2.0	6.2	0.3	1.7	1.0	3.0
29	0.1	4.3	2.7	7.1	0.1	1.8	2.2	4.1
30	0.3	6.1	4.3	10.7	0.3	2.8	2.9	6.0
31	1.5	7.4	4.8	**13.7**	1.0	3.5	2.9	**7.4**
Suma.	19.2	121.7	77.8	218.7	15.3	58.9	51.3	125.5

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Setiembre

Tab. V, 9.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	2.8	8.4	4.6	**15.8**	1.8	4.0	2.6	**8.4**
2	3.0	3.3	1.8	8.1	2.2	1.6	1.1	4.9
3	0.6	4.2	2.6	7.4	0.6	2.0	1.6	4.2
4	2.3	4.8	1.8	8.9	1.8	1.8	1.4	5.0
5	1.8	3.6	1.8	7.2	1.2	1.7	1.0	3.9
6	0.5	0.8	0.7	2.0	0.5	0.2	0.4	1.1
7	0.1	1.4	1.4	2.9	0.1	0.6	0.6	1.3
8	0.4	2.1	0.5	3.0	0.3	1.3	0.4	2.0
9	0	4.1	2.0	6.1	0	1.4	1.3	2.7
10	0.7	4.6	2.7	8.0	0.4	2.6	1.5	4.5
11	0.2	6.6	5.4	12.2	0.2	2.7	3.2	6.1
12	2.3	7.1	6.3	15.7	1.5	3.7	3.2	**8.4**
13	1.3	6.9	5.4	13.6	1.3	3.9	3.2	**8.4**
14	1.2	6.4	4.2	11.8	0.7	3.8	3.4	7.9
15	1.4	4.1	2.0	7.5	1.3	1.4	1.3	4.0
16	0.2	4.4	2.3	6.9	0.2	1.5	1.7	3.4
17	0.4	3.5	2.4	6.3	0.4	1.6	1.4	3.4
18	1.3	2.3	1.6	5.2	0.6	0.8	1.2	2.6
19	0.7	0.1	0	0.8	0.7	0.1	0	0.8
20	0	0.1	0.8	0.9	0	0.1	0.6	0.7
21	0.2	3.0	1.6	4.8	0.2	1.0	0.6	1.8
22	0	3.7	4.0	7.7	0	1.4	1.7	3.1
23	0.1	4.3	2.0	6.4	0.2	1.4	1.1	2.7
24	0.9	1.1	1.0	3.0	0.5	0.8	0.5	1.8
25	0.1	1.4	0.7	2.2	0.1	0.4	0.6	1.1
26	0.2	3.1	1.6	4.9	0.2	1.0	1.0	2.2
27	0.2	3.8	2.0	6.0	0.2	1.0	1.3	2.5
28	0.3	5.8	3.2	9.3	0.3	2.3	2.2	4.8
29	0.2	3.7	0.8	4.7	0.2	1.4	0.4	2.0
30	0	0	0.3	*0.3*	0	0	0.2	*0.2*
Suma.	23.4	108.7	67.5	199.6	17.7	47.5	40.7	105.9

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1886

Octubre

Tab. V, 10.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0	0	0.2	0.2	0	0	0.2	0.2
2	0	2.7	1.8	4.5	0	0.7	0.5	1.2
3	0	3.6	2.4	6.0	0	1.4	1.0	2.4
4	0.1	3.6	2.1	5.8	0.1	1.2	1.0	2.3
5	0.2	3.4	1.8	5.4	0.2	1.1	0.9	2.2
6	0.2	4.2	3.1	7.5	0.2	1.8	1.4	3.4
7	0.2	4.0	2.7	6.9	0.2	1.4	1.3	2.9
8	0.5	3.7	2.3	6.5	0.4	1.4	1.6	3.4
9	0	3.5	2.6	6.1	0	1.4	1.6	3.0
10	0.2	4.3	2.9	7.4	0.2	1.8	1.4	3.4
11	0.2	4.4	2.7	7.3	0.2	1.9	1.7	3.8
12	0.7	5.4	3.2	9.3	0.5	1.9	1.6	4.0
13	0.2	0.4	0.8	1.4	0.2	0.3	0.5	1.0
14	0.2	5.7	2.0	7.9	0.2	1.2	1.2	2.6
15	0	4.8	2.8	7.6	0.1	1.7	1.4	3.2
16	0.6	4.4	4.0	9.0	0.2	1.6	1.5	3.3
17	0.3	6.9	3.2	**10.4**	0.2	2.8	2.2	**5.2**
18	1.7	4.2	1.1	7.0	1.5	1.4	1.0	3.9
19	0.1	3.9	1.7	5.7	0.1	1.1	1.4	2.6
20	0.9	4.1	2.0	7.0	0.5	1.4	1.3	3.2
21	0.7	4.9	1.9	7.5	0.7	1.4	1.0	3.1
22	0.6	5.9	3.7	10.2	0.6	2.6	1.6	4.8
23	0.3	5.2	2.0	7.5	0.3	1.6	1.6	3.5
24	0.2	4.3	1.9	6.4	0.2	1.4	1.2	2.8
25	0.2	5.4	2.7	8.3	0.2	1.7	1.7	3.6
26	0.2	5.3	3.4	8.9	0.2	2.1	1.8	4.1
27	0.5	2.2	2.1	4.8	0.4	0.6	1.3	2.3
28	0.1	5.6	2.8	8.5	0.1	1.9	1.8	3.8
29	0.4	1.1	1.6	3.1	0.4	0.4	0.8	1.6
30	0	1.9	0.9	2.8	0	0.8	0.6	1.4
31	0	4.2	1.8	6.0	0	0.9	1.0	1.9
Suma.	9.5	123.2	70.2	202.9	8.1	42.9	39.1	90.1

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Noviembre

Tab. V, 11.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0	4.7	2.3	7.0	0	1.6	1.5	3.1
2	0.4	3.9	2.1	6.4	0.3	1.6	1.1	3.0
3	0.2	5.4	2.4	8.0	0.2	1.6	1.5	3.3
4	0.4	4.7	2.9	8.0	0.2	2.2	1.6	4.0
5	0.4	0.3	0.5	*1.2*	0.4	0.3	0.4	1.1
6	0.4	0.7	1.3	2.4	0.4	0.6	0.6	1.6
7	0.1	2.6	1.4	4.1	0.1	0.5	0.4	1.0
8	0.1	5.4	2.4	7.9	0.1	1.2	1.2	2.5
9	0.1	1.2	0	1.3	0.1	0.6	0	*0.7*
10	0.3	0.5	0.7	1.5	0.3	0.3	0.6	1.2
11	0.3	0.9	0.3	1.5	0.4	0.3	0.2	0.9
12	0.1	1.6	0.8	2.5	0.1	0 5	0.4	1.0
13	0.1	4.6	1.9	6.6	0.1	0.9	1.0	2.0
14	0.3	5.6	3.6	9.5	0.2	2.2	1.8	4.2
15	0.7	5.4	4.5	10.6	0.6	1.8	2.5	4.9
16	1.2	5.7	2.0	8.9	0.9	2.1	1.4	4.4
17	0.4	5.2	3.6	9.2	0.3	1.6	1.9	3.8
18	0.2	6.4	4.5	11.1	0.2	2.6	2.4	5.2
19	1.1	7.8	3.4	**12.3**	0.8	2.5	2.3	**5.6**
20	0.6	3.8	0	4.4	0.4	1.3	0	1.7
21	0.5	3.6	2.1	6.2	0.4	1.2	0.8	2.4
22	0.2	6.4	0.2	6.8	0.2	1.2	0.2	1.6
23	0.1	3.0	0.9	4.0	0.1	0.8	0.4	1.3
24	0.1	4.8	2.4	7.3	0.1	1.5	1.2	2.8
25	0.5	3.9	1.3	5.7	0.4	1.3	0.9	2.6
26	0.2	6.7	2.4	9.3	0.2	1.4	1.2	2.8
27	0.4	5.4	0.5	6.3	0.4	1.4	0.4	2.2
28	0.2	4.3	3.6	8.1	0.2	1.2	1.4	2.8
29	0.6	1.5	1.0	3.1	0.5	0.6	0.5	1.6
30	0.1	4.7	2.3	7.1	0.1	1.3	1.3	2.7
Suma.	10.3	120.7	57.3	188.3	8.7	38.2	31.1	78.0

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1886

Diciembre

Tab. V, 12.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.4	4.7	3.9	9.0	0.4	1.4	1.6	3.4
2	0.3	6.3	3.6	10.2	0.3	2.3	1.9	4.5
3	0.7	6.7	2.8	10.2	0.5	2.0	1.6	4.1
4	0.3	5.0	4.0	9.3	0.3	1.7	1.6	3.6
5	0.4	6.3	3.9	10.6	0.4	2.3	2.0	4.7
6	1.2	7.9	4.0	**13.1**	0.8	2.3	2.6	5.7
7	1.0	5.1	2.0	8.1	0.8	2.1	0.9	3.8
8	0.2	6.7	2.7	9.6	0.2	1.4	1.6	3.2
9	0.1	5.6	3.4	9.1	0.1	1.9	1.6	3.6
10	0.4	4.9	2.4	7.7	0.4	1.3	1.5	3.2
11	0.4	1.3	1.3	3.0	0.4	0.4	0.6	1.4
12	0.1	5.2	3.6	8.9	0.1	1.2	1.6	2.9
13	0.2	7.4	2.7	10.3	0.2	1.6	1.0	2.8
14	0.2	5.4	2.2	7.8	0.2	1.0	1.3	2.5
15	0.1	4.9	3.1	8.1	0.1	1.2	1.5	2.8
16	0.1	7.2	3.5	10.8	0.1	1.4	1.7	3.2
17	0.4	7.2	4.6	12.2	0.4	2.3	2.4	5.1
18	0.6	7.4	3.0	11.0	0.6	3.0	2.2	**5.8**
19	0.4	5.1	2.9	8.4	0.4	1.2	1.5	3.1
20	0.5	6.2	4.4	11.1	0.5	1.9	2.3	4.7
21	0.9	4.0	3.4	8.3	0.8	1.5	1.8	4.1
22	0.2	6.1	3.9	10.2	0.3	0.7	1.9	2.9
23	0	0.8	0.6	*1.4*	0	0.5	0.5	*1.0*
24	0.1	5.8	4.1	10.0	0.1	1.4	1.8	3.3
25	0.3	4.6	1.3	6.2	0.3	2.0	1.0	3.3
26	0.3	7.1	4.4	11.8	0.3	2.0	2.0	4.3
27	0.9	3.3	0.2	4.4	0.8	0.9	0.2	1.9
28	1.2	5.8	2.4	9.4	0.9	2.0	1.4	4.3
29	0.3	5.0	3.1	8.4	0.3	1.9	1.3	3.5
30	0.3	6.0	4.4	10.7	0.3	2.1	2.2	4.6
31	0.6	2.8	0.6	4.0	0.6	1.4	0.4	2.4
Suma.	13.1	167.8	92.4	273.3	11.9	50.3	47.5	109.7

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1886

Tab. VI, 1.

FECHA	Enero					Febrero				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	21.3	41.1	22.6	**51.5**	19.5	20.9	27.0	21.5	31.9	18.5
2	21.8	35.0	25.4	47.5	18.2	20 0	23.1	19.9	23.3	18.3
3	19.7	28.8	20.8	35.0	19.1	19.1	24.0	21.9	27.1	18.0
4	19.6	25.9	23.2	40.3	16.5	20.8	34.0	19.5	39.7	19.1
5	20.4	38.7	24.8	49.5	17.0	19.4	30.8	21.4	31.9	18.0
6	23.0	38.4	23.1	49.6	21.0	19.4	31.3	21.8	32.0	17.5
7	20.4	**41.5**	25.0	51.8	16.3	20.4	23.3	21.0	24.1	19.3
8	23.5	22.4	21.4	39.1	20.2	19.6	26.3	20.8	34.3	19.2
9	20.5	34.4	23.9	35.7	19.0	19.9	23.9	21.3	24.0	17.7
10	24.5	34.0	23.6	38.0	22.4	21.0	41.5	23.3	44.0	20.2
11	21.3	27.9	22.8	31.3	21.0	21.9	30.8	22.3	41.1	20.0
12	22.7	35.3	25.6	38.6	21.0	19.7	23.5	21.2	24.5	19.0
13	24.8	33.1	21.5	37.5	22.7	16.2	28.3	15.7	31.0	14.1
14	21.5	33.1	24.2	34.9	19.7	*13.7*	38.5	16.4	39.9	*11.3*
15	22.9	35.0	24.5	36.6	21.5	14.8	23.4	17.8	31.5	12.9
16	21.7	26.5	24.0	29.9	20.6	14.9	**42.0**	20.7	43.3	12.7
17	20.4	24.1	21.0	28.5	19.2	17.6	39.8	21.5	40.9	15.6
18	20.7	30.6	22.7	34.5	18.7	16.8	33.2	21.2	42.2	14.6
19	18.9	28.4	19.6	33.0	17.6	16.4	39.8	21.8	**46.7**	14.8
20	*16.7*	29.3	19.9	34.3	*14.4*	20.2	40.7	23.7	41.1	18.4
21	18.5	28.7	20.8	29.8	17.0	22.6	24.3	21.4	26.5	19.4
22	21.8	28.9	22.4	30.3	14.5	20.8	35.7	23.7	44.3	18.8
23	20.5	28.3	23.8	30.2	14.6	21.6	37.1	25.5	42.8	19.6
24	22.5	21.3	20.3	22.6	22.0	22.8	26.6	20.8	30.4	20.9
25	18.0	30.3	21.0	32.6	16.1	20.4	29.7	22.6	33.6	18.6
26	19.8	26.4	21.4	27.3	18.5	20.4	27.3	21.8	32.8	18.9
27	19.8	26.0	21.5	29.3	18.5	19.6	30.0	22.9	36.9	17.9
28	22.0	31.8	23.5	32.5	20.1	20.8	31.2	24.7	37.4	19.2
29	22.1	24.6	19.5	26.6	20.8					
30	20.0	28.5	21.7	30.7	19.4					
31	19.4	38.3	22.1	43.7	18.6					
1-10	21.5	34.0	23.4	43.8	18.9	20.1	28.5	21.2	31.2	18.6
11-20	21.2	30.3	22.6	33.9	19 6	17.2	34.0	20.2	38.2	15.3
21-31	20.4	28.5	21.6	30.5	18.2	21.1	30.2	22.9	35.6	19.2
Prom.	21.0	30.9	22.5	35.9	18.9	19.3	31.0	21.4	35.0	17.6

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1886

Tab. VI, 2.

FECHA	Marzo					Abril				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	21.1	25.3	19.8	29.9	20.3	16.4	23.3	20.0	26.7	15.4
2	19.0	20.6	19.2	21.7	18.7	18.5	24.1	21.8	29.2	17.2
3	18.0	29.6	21.3	31.4	16.5	20.1	19.8	18.0	21.0	19.7
4	19.0	34.5	23.4	39.2	17.3	16.0	17.2	15.4	17.3	15.6
5	20.4	35.5	25.0	43.2	19.9	13.3	20.9	16.2	25.4	12.4
6	23.6	23.4	19.7	30.0	22.4	12.0	23.4	16.8	31.3	10.8
7	15.2	28.6	19.0	36.0	13.7	13.2	25.8	18.6	31.8	11.8
8	15.8	32.0	21.2	40.4	14.2	16.3	24.0	18.3	29.3	15.8
9	18.1	**35.8**	24.0	41.6	16.8	14.4	19.7	15.2	20.4	13.3
10	20.0	33.9	24.2	43.8	18.5	13.2	17.7	14.4	18.7	11.7
11	20.3	34.2	23.7	**46.8**	19.0	9.8	17.3	8.7	25.5	9.0
12	19.9	35.7	23.8	**46.8**	18.0	*6.8*	14.6	10.9	15.0	*4.8*
13	21.0	31.5	22.4	44.5	19.9	10.0	17.0	13.2	18.3	7.9
14	20.6	29.5	21.4	42.7	18.9	12.7	20.5	15.0	26.4	11.8
15	16.8	19.6	16.4	21.0	16.3	14.7	22.6	13.9	27.6	13.9
16	13.7	24.0	18.4	33.2	12.7	9.3	24.3	15.2	31.1	8.2
17	13.8	23.4	18.6	31.5	12.8	10.4	24.8	16.9	30.2	9.2
18	18.4	25.3	17.2	33.5	16.6	11.3	25.7	16.5	**33.0**	10.1
19	15.3	20.2	15.7	28.2	14.5	12.2	**26.7**	19.3	32.8	11.0
20	*12.6*	19.1	16.6	26.6	*11.3*	17.0	24.0	17.6	27.3	15.9
21	16.8	17.9	17.1	18.9	16.1	12.9	13.2	12.0	14.1	12.8
22	16.1	16.8	15.7	17.5	15.6	12.5	13.6	12.1	14.1	11.4
23	15.9	18.6	16.7	19.1	14.1	11.8	14.7	9.3	15.0	11.2
24	15.0	20.8	16.5	28.8	13.9	8.6	15.1	8.0	16.7	7.6
25	14.7	19.5	15.6	23.3	13.5	7.4	15.7	11.8	17.6	5.2
26	15.4	21.4	18.5	26.2	13.2	10.6	18.8	12.4	23.5	8.6
27	16.3	20.3	17.7	20.7	15.2	9.5	18.7	15.2	20.5	8.5
28	15.7	19.8	17.1	23.2	14.5	10.5	19.6	15.2	23.5	13.5
29	15.0	22.1	17.1	28.0	14.1	11.1	20.3	16.0	25.0	10.0
30	14.1	24.3	18.7	29.1	13.1	13.4	23.8	12.8	25.1	12.8
31	15.5	23.3	18.2	27.1	14.0					
1-10	19.0	29.9	21.7	36.0	17.8	15.3	21.6	17.5	25.1	14.4
11-20	17.2	26.3	19.4	35.5	16.0	11.4	21.8	14.7	26.7	10.2
21-31	15.5	20.4	17.2	23.8	14.3	10.8	17.4	12.5	19.5	10.2
Prom.	17.2	25.4	19.3	31.5	16.0	12.5	20.2	14.9	23.8	11.6

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1886

Tab. VI, 3.

FECHA	Mayo					Junio				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	11.4	21.2	14.5	27.9	10.2	6.7	11.1	8.0	14.4	6.1
2	12.6	21.1	15.3	26.7	11.0	6.6	15.0	6.6	15.4	6.0
3	9.5	20.7	14.5	26.5	7.8	2.8	14.7	6.6	15.0	2.0
4	8.0	20.1	11.8	23.9	6.7	3.7	16.5	8.1	17.8	3.0
5	12.9	22.8	15.6	27.2	10.7	6.3	12.1	8.5	12.8	4.7
6	14.0	22.5	15.3	25.8	11.3	8.4	10.3	8.3	10.7	7.2
7	9.1	14.7	8.5	17.9	8.5	7.8	7.7	6.1	8.6	7.6
8	4.5	17.1	8.8	21.4	4.0	5.7	10.2	7.5	14.3	5.2
9	5.3	18.0	9.3	23.7	4.2	2.2	13.2	4.3	16.0	1.4
10	5.8	16.1	5.5	21.4	3.8	0.6	12.3	5.1	13.0	0.2
11	3.6	17.8	7.8	22.5	2.2	3.1	13.2	5.6	14.8	1.8
12	4.0	19.5	9.2	25.4	2.3	6.2	14.4	9.3	17.0	3.8
13	4.0	15.8	10.4	17.4	2.5	8.7	11.3	8.1	11.5	6.6
14	4.9	19.6	10.2	23.6	3.7	8.9	12.5	6.2	15.8	7.0
15	6.7	18.7	8.8	31.3	6.0	1.6	15.8	6.4	19.2	1.0
16	4.0	19.0	8.7	25.1	2.4	1.7	16.4	5.2	18.8	1.0
17	*2.0*	20.6	9.4	22.6	*1.0*	1.8	15.5	9.2	20.2	1.0
18	5.0	22.3	11.9	26.3	3.6	7.0	11.0	4.7	11.8	6.7
19	8.4	25.1	11.0	28.6	6.7	1.9	14.7	8.1	18.3	1.3
20	10.8	20.7	14.6	21.6	9.2	6.2	12.1	3.0	14.4	6.0
21	13.1	27.1	16.4	28.3	12.6	−0.5	12.0	1.7	15.4	−1.2
22	15.3	14.6	9.3	16.3	14.5	*−2.0*	14.8	3.2	19.3	*−2.5*
23	2.8	18.4	5.5	22.3	1.8	−0.8	18.7	4.8	19.8	−2.0
24	2.1	21.3	9.7	22.9	1.4	−0.5	18.8	8.3	20.5	−0.3
25	4.0	24.4	9.8	27.3	2.7	3.5	**21.8**	10.5	**22.6**	2.5
26	5.3	26.8	11.8	27.6	4.3	10.0	21.2	13.2	20.5	9.0
27	5.2	**30.0**	14.7	**31.4**	4.0	12.1	**21.8**	13.8	22.0	11.8
28	9.5	29.7	18.0	30.3	8.6	10.2	17.3	9.9	19.7	8.9
29	12.5	27.9	17.3	29.8	11.8	5.2	16.5	4.9	18.5	4.3
30	16.7	18.3	14.7	18.4	15.0	5.3	14.6	8.3	14.9	2.3
31	11.0	12.3	10.0	15.6	10.0					
1-10	9.3	19.4	11.9	24.2	7.8	5.1	12.3	6.9	13.8	4.3
11-20	5.3	19.9	10.2	24.4	4.0	4.7	13.7	6.6	16.2	3.6
21-31	8.6	22.8	12.5	24.6	7.9	4.2	17.8	7.9	19.3	3.3
Prom.	7.9	20.8	11.6	24.4	6.6	4.7	14.6	7.1	16.4	3.7

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1886

Tab. VI, 4.

FECHA	Julio					Agosto				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	5.1	17.7	5.8	21.8	4.9	10.1	17.0	6.3	17.3	9.8
2	1.8	18.1	4.9	20.8	1.3	1.5	20.1	7.5	24.3	1.3
3	0.8	17.6	4.4	21.8	0.7	1.7	18.3	7.5	24.2	1.2
4	1.2	19.7	5.6	23.1	1.1	2.1	21.6	7.5	26.6	1.4
5	2.0	18.9	4.7	21.5	1.3	2.3	21.1	8.4	26.6	1.9
6	1.8	16.4	5.0	20.5	1.6	4.5	18.5	6.3	23.1	4.1
7	2.6	18.5	6.1	19.8	2.5	2.3	19.9	6.7	25.5	1.4
8	6.0	12.5	4.6	16.4	4.0	6.2	23.2	13.8	30.0	5.4
9	—2.1	12.2	—2.0	17.0	—2.9	9.7	20.7	7.5	28.8	9.5
10	*—5.0*	13.5	—0.3	17.2	*—5.5*	2.1	22.7	8.8	30.8	1.2
11	—3.6	13.0	1.8	14.0	—3.7	5.8	24.0	12.0	30.3	5.0
12	—3.6	18.7	0.7	20.0	—3.8	10.0	20.8	7.3	26.2	9.0
13	—2.8	19.3	3.0	21.2	—3.5	5.1	25.2	8.6	29.0	3.5
14	—2.4	17.6	7.0	19.6	—2.5	4.6	19.1	5.1	25.6	4.0
15	1.4	19.1	5.5	21.8	1.2	8.5	18.9	7.2	23.1	1.2
16	1.0	19.0	5.7	21.8	—0.0	*1.1*	28.2	10.0	32.1	0.5
17	4.7	18.3	8.6	21.4	2.8	12.3	22.5	7.3	24.1	8.6
18	6.0	20.1	10.1	23.0	5.9	2.0	24.4	6.7	29.6	1.4
19	6.2	25.0	11.7	29.3	5.7	5.9	22.5	7.7	25.3	5.0
20	6.3	23.7	10.3	25.5	5.8	1.9	23.2	5.5	30.0	0.4
21	10.0	18.6	8.0	21.7	6.5	1.3	24.2	6.3	29.5	0.4
22	7.2	17.8	9.0	20.3	6.8	1.2	26.9	7.3	32.4	*—0.0*
23	4.5	21.0	9.4	25.7	4.0	1.2	28.5	7.3	33.8	0.4
24	10.2	23.4	13.2	26.2	7.4	2.1	28.7	8.8	33.6	1.2
25	7.9	22.0	8.8	27.0	7.5	5.3	28.7	13.5	36.6	4.7
26	5.5	22.3	14.6	26.6	4.6	14.5	24.3	9.4	33.1	11.4
27	10.8	**27.8**	16.8	**30.0**	10.6	5.0	26.3	10.3	37.1	3.6
28	12.3	15.7	7.3	16.8	12.3	8.0	29.0	12.1	37.9	6.4
29	4.6	18.5	8.4	25.0	3.1	6.7	**33.3**	14.3	**40.6**	5.5
30	6.5	23.1	12.0	27.0	3.8	8.1	32.0	13.3	35.9	6.7
31	6.5	22.0	13.6	25.1	5.7	14.0	30.6	14.5	36.7	9.4
1-10	1.4	16.5	3.9	20.0	0.9	4.3	20.3	8.0	25.7	3.7
11-20	1.3	19.4	6.4	21.8	0.8	5.7	22.9	7.7	27.5	3.9
21-31	7.8	21.1	11.0	24.7	6.6	6.7	31.3	11.7	38.7	5.0
Prom.	3.7	19.1	7.2	22.2	2.9	5.4	24.0	8.9	29.7	3.0

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1886

Tab. VI, 5.

FECHA	Setiembre					Octubre				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	15.4	36.1	18.5	42.5	12.4	12.7	15.8	11.3	15.8	11.0
2	13.0	28.3	15.5	37.0	12.1	12.9	25.7	13.6	29.5	10.9
3	14.6	36.4	18.5	40.0	11.8	13 4	23.4	17.1	29.1	11.0
4	16.2	32.2	17.3	36.0	16.2	9.4	19.7	10.4	23.3	8.6
5	15.0	27.0	17.2	30.6	13.0	*7.0*	26.7	10.8	26.7	*5.4*
6	15.6	21.0	13.7	22.6	15.0	9.7	20.9	12.3	27.3	6.7
7	14.0	26.3	14.4	30.5	13.4	11.2	25.0	15.1	30.2	8.0
8	12.1	15.9	9.5	31.1	12.0	13.5	26.3	15.4	29.4	10.7
9	5.2	30.5	11.0	37.3	3.7	14.6	27.8	15.0	30.1	11.2
10	12.2	32.5	11.3	39.5	6.9	13.7	28.1	14.2	31.1	10.6
11	7.7	36.0	16.5	41.9	5.0	12.1	30.4	14.5	34.0	10.0
12	11.5	37.7	16.6	45.5	9.1	14.7	36.5	15.5	37.1	11.2
13	10.5	**41.3**	19.7	**47.0**	9.6	13.4	20.3	13.4	20.6	13.0
14	13.1	33.1	14.4	39.2	9.6	15.7	29.1	15.2	33.0	12.3
15	8.5	35.4	11.8	40.1	7.1	14.6	31.7	16.6	33.7	10.5
16	8.1	37.0	13.3	42.6	6.4	15.8	37.6	20.0	38.4	12.1
17	9.6	30.0	14.3	35.1	8.0	18.6	43.6	18.0	44.7	14.7
18	10.1	26.0	12.2	28.1	9.7	13.6	26.6	13.1	30.7	12.8
19	8.1	8.2	4.8	10.2	7.9	14.6	23.4	17.0	34.5	12.8
20	4.2	9.0	3.2	11.2	1.6	17.1	38.0	15.1	40.8	15.4
21	*2.3*	19.1	6.6	22.0	*0.8*	13.5	35.7	13.3	36.5	9.5
22	4.0	23.1	9.6	25.6	3.1	15.8	35.1	18.0	41.5	10.3
23	7.1	23.3	12.5	24.5	5.2	19.3	34.1	15.8	41.6	13.4
24	10.1	12.0	9.4	14.0	9.3	15.8	31.1	12.6	36.3	13.5
25	9.9	13.0	9.6	14.5	8.6	12.6	35.2	16.7	43.0	9.2
26	9.2	22.7	9.8	24.8	8.5	15.2	37.7	21.6	45.6	11.0
27	6.2	22.0	11.3	25.0	4.6	17.2	32.8	17.9	41.7	14.5
28	7.1	23.2	13.4	26.7	6.3	18.3	38.7	21.0	43.5	13.5
29	12.1	18.8	14.8	31.1	10.7	15.8	34.0	16.1	35.0	14.3
30	12.6	15.4	13.0	16.2	12.2	18.7	32.5	16.1	31.5	14.5
31						16.4	**44.1**	19.3	**46.0**	11.2
1-10	13.3	28.6	14.7	34.7	11.7	11.8	23.9	13.5	27.3	9.4
11-20	9.1	29.4	12.7	34.1	7.4	15.0	31.7	15.8	34.7	12.5
21-31	8.1	19.3	11.0	22.4	6.9	16.2	35.5	17.1	40.5	12.3
Prom.	10.2	25.7	12.8	30.4	8.7	14.4	30.6	15.5	34.4	11.4

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CORDOBA, 1886

Tab. VI. 6.

FECHA	Noviembre					Diciembre				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	17.6	40.4	21.4	45.4	12.6	18.7	39.2	19.6	54.1	*12.2*
2	19.7	27.1	20.7	46.0	15.8	21.6	43.6	20.0	56.7	13.9
3	18.8	36.7	22.7	51.3	14.2	24.6	38.9	20.3	55.4	15.8
4	19.2	36.7	24.1	43.5	18.2	20.0	45.9	22.9	56.7	14.5
5	19.2	19.5	16.5	32.5	18.2	26.6	47.2	25.0	56.1	17.5
6	17.8	23.9	17.0	30.7	15.4	27.9	44.5	26.8	60.2	20.9
7	16.4	30.4	17.7	36.9	14.8	18.5	26.0	16.6	35.4	17.7
8	17.2	36.0	21.1	46.1	14.7	20.2	34.3	20.6	47.2	12.9
9	21.3	17.1	16.6	29.6	17.0	21.8	40.5	23.2	52.9	16.5
10	13.2	18.2	12.2	24.4	11.8	25.4	38.3	27.2	48.3	19.1
11	*10.9*	13.9	11.8	18.9	*10.2*	27.2	23.7	21.8	28.3	26.6
12	12.6	20.8	14.5	23.7	11.4	25.0	44.1	24.4	50.4	16.5
13	15.0	33.5	16.0	46.7	13.1	24.7	36.8	22.6	48.1	19.6
14	16.9	39.0	19.3	52.0	11.4	20.4	31.3	23.0	32.6	19.1
15	18.4	45.6	24.1	54.7	14.9	20.6	38.4	23.8	47.9	17.0
16	20.7	40.8	18.6	54.6	18.8	23.6	43.7	25.2	48.7	16.6
17	18.2	43.2	20.1	58.1	12.7	24.8	39.4	25.4	49.5	19.4
18	19.3	**46.9**	22.6	58.1	13.7	26.4	48.5	20.6	56.4	19.4
19	24.3	43.4	24.6	55.1	19.3	26.2	46.3	27.4	57.9	18.7
20	22.7	24.5	19.7	**59.4**	18.7	30.1	45.0	28.2	58.3	21.2
21	20.5	29.5	22.0	37.8	18.6	21.8	39.9	23.6	50.1	20.1
22	21.2	23.6	17.5	37.3	18.0	29.0	46.3	27.5	57.2	18.0
23	18.0	35.2	19.1	38.5	16.8	28.8	24.8	21.0	34.2	21.2
24	19.6	33.1	19.8	38.2	15.6	26.0	41.2	24.0	52.5	18.2
25	19.0	32.8	18.2	40.2	16.5	27.0	23.5	21.9	56.9	19.0
26	18.7	30.0	19.8	43.0	14.0	24.6	**52.6**	27.7	**63.4**	18.3
27	19.8	29.1	17.8	44.4	16.8	26.8	21.0	16.6	43.7	22.1
28	18.4	29.3	19.0	42.3	17.2	*16.7*	27.0	16.8	37.0	13.0
29	19.0	20.6	16.3	26.0	15.5	19.8	40.2	19.5	47.0	13.0
30	17.0	39.1	16.8	45.2	11.8	22.8	47.8	22.8	55.2	13.0
31						22.8	19.0	15.8	35.3	17.0
1-10	18.0	28.6	19.0	38.6	15.3	22.5	39.8	22.2	52.3	16.1
11-20	17.9	35.2	19.1	48.1	14.4	24.9	39.7	24.2	47.8	19.4
21-31	19.1	30.2	18.6	39.3	16.1	24.2	34.8	21.6	48.4	17.5
Prom.	18.4	31.3	18.9	42.0	15.3	23.9	38.0	22.6	49.5	17.7

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. VII, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	22.8	26.9	25.4	21.0	23.2	22.5	22.2	23.2	21.2
2	21.7	24.2	25.8	20.4	21.6	20.7	20.3	20.7	20.6
3	23.0	24.2	22.8	19.6	21.9	22.0	18.8	22.1	21.4
4	20.0	23.8	23.4	20.7	24.4	21.5	19.6	25.6	23.8
5	20.4	27.1	25.7	19.8	23.6	22.2	21.8	26.5	25.2
6	23.0	26.6	25.2	19.9	23.2	22.3	23.7	23.2	21.7
7	21.0	26.8	26.0	20.8	22.1	21.5	17.8	23.5	21.2
8	23.0	24.8	23.2	20.4	23.1	22.0	17.6	24.1	22.6
9	21.0	25.9	24.6	19.9	21.6	21.4	19.8	26.4	24.6
10	23.5	27.4	25.1	20.7	26.0	24.2	21.2	26.5	24.7
11	22.6	24.5	24.0	22.1	25.7	24.5	21.6	27.4	24.9
12	22.6	27.4	26.3	21.5	22.6	22.2	21.4	**27.9**	25.6
13	24.4	**27.9**	23.3	18.5	20.6	19.0	22.6	26.8	24.4
14	22.0	25.6	24.9	*15.5*	20.3	19.2	21.8	25.7	23.4
15	23.2	26.6	25.4	16.6	20.0	19.0	19.9	19.3	19.0
16	22.6	24.7	24.4	16.4	22.8	21.4	16.1	21.7	20.0
17	21.5	22.7	22.2	18.8	22.6	21.8	16.5	21.6	20.1
18	22.3	24.2	23.4	18.4	24.5	22.8	18.4	22.6	20.4
19	20.4	22 6	21.6	18.6	25.1	23.2	17.0	19.5	18.0
20	*18.3*	22.2	21.5	20.7	25.8	24.5	*14.8*	18.7	17.5
21	19.3	23.2	22.0	22.5	23.2	22.6	17.3	18.2	17.8
22	20.2	24.4	22.3	21.0	26.6	24.8	17.1	17.2	16.5
23	20.7	24.2	24.0	22.0	**27.4**	26.2	16.2	17.8	17.2
24	22.9	21.5	21.5	23.2	25.2	22.4	16.2	19.3	17.8
25	19.2	23.7	22.0	20.9	25.4	23.5	15.7	18.6	17.4
26	20.5	22.9	22.3	21.0	24.8	23.1	15.7	19.9	18.8
27	20.5	23.2	22.2	20.4	26.0	24.0	17.2	19.4	18.4
28	20.0	25.0	22.2	21.5	26.4	24.8	16.8	18.8	17.9
29	22.1	25.8	20.6				16.3	20.7	18.6
30	20.0	23.8	22.8				15.7	21.1	19.3
31	20.0	25.0	23.3				16.7	20.6	19.2
1–10	21.94	26.07	24.72	20.32	23.07	22.03	20.28	24.18	22.70
11–20	21.99	24.84	23.70	18.71	23.00	21.77	19.01	23.12	21.33
21–31	20·49	23.88	22.30	21.56	25.62	23.93	16.45	19.24	18.08
Promedio.	21.44	24.90	23.53	20.10	23.77	22.47	18.51	22.08	20.62

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. VII, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	17.3	21.0	20.3	13.2	17.1	15.5	9.8	11.7	10.2
2	18.7	**21.8**	21.6	14.0	17.0	16.1	9.2	12.2	10.0
3	20.4	19.9	19.2	12.7	16.8	15.8	6.8	10.8	9.2
4	17.4	17.4	17.0	11.7	16.1	14.8	6.4	12.1	10.1
5	15.1	19.1	17.6	13.4	17.8	15.6	7.7	10.6	9.6
6	14.5	20.2	18.5	14.9	18.0	16.5	9.1	10.0	9.2
7	15.2	21.3	19.8	12.2	14.3	12.2	8.7	8.7	7.8
8	17.7	21.0	19.3	8.7	13.7	11.7	7.2	9.6	8.4
9	16.3	18.2	17.2	8.6	13.3	12.1	5.5	9.7	7.6
10	15.2	17.0	16.4	8.5	12.5	10.2	4.4	8.8	7.4
11	13.2	15.5	13.3	*6.7*	13.0	10.8	5.2	9.4	7.5
12	*9.7*	12.9	12.5	7.0	13.3	11.1	6.9	10.7	9.7
13	11.2	14.2	13.7	7.7	12.2	11.3	8.9	10.3	9.2
14	13.2	16.8	15.6	8.0	14.0	12.0	9.0	10.3	7.8
15	14.9	18.4	16.4	9.4	14.2	11.7	4.9	10.1	8.6
16	12.5	18.4	17.0	7.9	13.8	11.8	5.1	10.3	8.3
17	13.3	19.1	17.8	7.8	14.1	12.1	5.0	10.0	9.3
18	13.7	19.6	18.4	8.5	14.9	13.1	8.4	9.4	7.4
19	14.5	20.1	19.3	10.5	16.4	14.0	5.1	10.5	9.2
20	17.6	20.4	18.8	12.0	15.4	14.6	7.6	9.2	6.8
21	15.9	15.4	14.8	13.7	18.3	16.9	3.5	8.0	6.0
22	14.0	14.3	14.0	15.6	14.8	12.7	*2.5*	7.6	6.0
23	13.0	14.2	13.4	9.0	13.6	10.8	2.6	9.0	7.3
24	11.6	14.2	13.3	7.4	13.3	11.8	3.8	10.4	9.1
25	10.5	13.8	13.2	8.3	15.0	12.9	6.0	12.8	11.4
26	11.8	15.3	14.1	9.2	15.7	13.6	10.5	14.8	13.0
27	11.5	15.2	15.1	9.6	16.6	15.8	12.3	**15.4**	14.0
28	12.4	16.2	15.4	12.4	18.6	17.4	11.4	13.8	11.4
29	13.7	16.6	16.1	14.6	**19.3**	18.2	8.5	11.7	9.1
30	14.6	17.0	15.1	16.6	17.4	15.5	7.1	10.5	9.4
31				12.0	13.1	12.1			
1-10	16.78	19.69	18.69	11.79	15.66	14.05	7.48	10.42	8.95
11-20	13.38	17.54	16.28	8.55	14.13	12.25	6.61	10.02	8.38
21-31	12.90	15.22	14.45	11.67	15.97	14.34	6.82	11.40	9.67
Promedio.	14.35	17.48	16.47	10.70	15.28	13.57	6.97	10.61	9.00

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. VII, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	7.7	12.3	9.8	12.0	14.1	11.5	15.4	24.9	21.2
2	6.0	11.6	9.1	7.3	14.0	11.6	16.4	23.2	19.4
3	5.5	11.3	8.8	7.1	13.4	10.8	16.2	25.4	21.8
4	5.6	12.4	9.8	6.8	14.3	11.5	18.6	24 4	20.4
5	5.8	12.4	9.5	7.2	14.0	11.5	17.3	22.3	19.5
6	5.9	11.9	9.0	8.4	13.4	10.7	17.5	18.9	17.4
7	6.0	10.9	9.3	6.8	13.7	11.1	15.8	19.0	17.2
8	7.7	10.2	7.8	8.8	16.0	14.3	15.0	18.3	14.7
9	3.7	8.3	5.2	12.0	16.6	12.6	10.4	20.6	16.4
10	*1.2*	7.3	4.7	7.6	15.5	12.5	12.8	22.3	17.5
11	1.7	6.8	5.4	8.9	17.0	14.4	12.1	23.8	19.7
12	1.6	8.6	6.0	11.8	16.0	12.4	15.2	25.9	21.4
13	2.2	9.3	6.8	8.6	15.9	12.7	16.1	**26.4**	22.4
14	2.6	10.0	8.6	8.9	14.7	11.0	16.4	24.0	19.5
15	5.1	11.8	9.2	8.1	13.5	11.3	14.3	23.6	18.7
16	4.9	11.2	9.0	6.6	16.4	13.6	13.6	23.9	19.0
17	6.4	12.3	10.4	12.7	16.7	12.4	14.4	21.4	17.8
18	8.6	13.5	11.9	7.6	15·9	12.0	14.7	18.7	15.8
19	9.2	15.9	13.7	8.9	15.4	11.4	13.4	12.2	8.8
20	9.5	15.6	13.1	6.7	16.0	11.4	6.4	9.4	6.7
21	10.4	14.1	11.4	6.6	15.8	11.4	*4.8*	13.8	10.5
22	9.6	13.3	11.3	*6.4*	16.4	12.2	7.2	15.8	12.4
23	8.2	14.3	12.1	6.8	17.2	13.0	9.1	16.6	14.1
24	10.2	16.2	14.2	7.6	17.8	13.4	11.8	13.4	11.8
25	11.0	16.5	13.4	9.4	20.1	16.5	10.6	12.6	11.0
26	9.4	15.8	14.5	13.7	20.1	14.6	10.2	15.4	11.8
27	12.6	**18.8**	17.0	9.9	20.3	15.6	8.8	17.6	14.6
28	14.0	14.8	11.9	11.4	21.3	17.0	10.4	18.2	15.7
29	8.9	14.3	11.4	11.6	22.4	17.6	13.2	19.2	16.6
30	8.8	15.8	14.0	12.5	21.8	17.7	14.5	15.4	14.3
31	10.0	16.1	14.4	14.7	**22.5**	18.4			
1–10	5.51	10.86	8.30	8.40	14.50	11.81	15.54	21.93	18.55
11–20	5.18	11.50	9.41	8.88	15.75	12·26	13.66	20.93	46.98
21–31	10.28	15.45	13.24	10.05	19.61	15.22	10.06	15.80	13.28
Promedio.	7.10	12.70	10.41	9.14	16.72	13.16	13.09	19.55	16.27

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. VII, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	13.2	14.4	13.8	18.4	27.9	23.6	*17.2*	30.6	23.4
2	13.2	19.4	16.6	20.3	26.5	23.3	19.2	31.4	24.5
3	13.8	19.4	17.8	19.4	28.7	25.6	20.9	31.4	25.1
4	11.8	17.3	13.5	21.7	29.6	25.7	20.8	32.3	26.2
5	*9.8*	17.8	14.4	21.8	24.3	20.5	22.8	33.5	27.8
6	10.8	18.5	15.2	18.5	22.7	19.6	24.7	34.8	29.4
7	12.0	21.0	17.6	18.0	25.0	20.4	21.9	25.9	21.4
8	14.3	21.8	18.4	18.2	27.4	23.2	18.3	28.2	23.2
9	15·4	20.7	17.7	20.3	20.4	18.7	20.6	30.9	25.7
10	14·8	22.3	18.4	16.1	18.5	15.0	23.3	30.6	27.8
11	14.5	23.1	19.1	*13.1*	15.3	13.6	25.6	25.0	24.4
12	15.4	24.1	19.7	13.3	16.1	15.4	22.1	32.2	27.2
13	16.5	19.3	16.9	14.8	23.6	19.2	24.8	33.2	25.7
14	15.3	22.9	18.8	15.7	26.1	21.6	23.1	29.2	25.0
15	15.2	23.6	20.2	18.3	29.2	25.1	21.6	31.6	26.5
16	16.5	26.2	22.2	21.6	30.8	23.7	22.9	32.4	27.6
17	18.5	**28.8**	24.6	18.8	31.0	24.8	24.2	30.1	27.8
18	17.5	22.8	18.1	19.7	31.4	25.8	24.7	34.5	27.1
19	16.3	22.2	19.0	22.9	**31.6**	27.2	24.0	33.6	29.0
20	17.6	26.5	19.4	22.9	30.0	23.0	26.0	34.7	30.4
21	14.7	23.7	18.6	21.1	28.2	23.8	25.7	31.0	27.5
22	15.4	26.1	21.6	21.2	24.7	19.4	24.3	34.0	29.8
23	17.9	27.1	21.2	18.8	25.6	21.6	26.4	25.7	24.3
24	17.3	24.7	19.5	19.0	26.4	22.1	22.7	31.4	26.8
25	14.8	26.4	21.4	19.2	26.6	21.2	24.0	31.1	25.7
26	16.8	28.3	23.4	17.9	28.0	22.3	23.3	**35.6**	30.2
27	19.6	26.4	22.2	20.0	28.0	20.7	26.4	25.9	22.2
28	18.6	27.5	23.7	19.3	27.2	22.0	18.2	24.6	20.6
29	19.1	22.4	20.0	19.0	20·9	18.8	18.0	27.7	23.3
30	18.2	22.6	20.1	16.3	26.8	20.6	19.6	32.1	26.5
31	16.5	26.6	22.5				22.3	22.8	20.3
1–10	12.91	19.26	16.34	19.27	25.10	21.59	20.97	30.96	25.45
11–20	16.33	23.95	19.80	18.11	26.51	21.94	23.90	31.65	27.07
21–31	17.17	25.62	21.29	19.18	26.24	21.25	22.81	29.17	25.20
Promedio.	15.53	23.03	19.21	18.85	25.95	21.58	22.57	30.55	25.88

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. VIII, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.6	24.0	25.4	21.8	22.1	22.6	23.0	22.7	22.3
2	22.9	24.0	25.4	21.4	21.5	21.3	31.2	21.0	21.1
3	24.0	23.5	23.6	20.6	21.2	22.0	20.1	21.5	21.5
4	21.6	22.7	23.5	21.3	22.0	22.2	20.6	22.0	23.5
5	21.8	23.7	25.2	20.8	21.6	22.3	22.4	23.5	24.6
6	23.5	23.9	25.1	21.0	21.6	22.4	23.9	23.4	22.8
7	22.6	23.7	25.5	21.4	21.6	21.8	20.2	21.1	21.8
8	23.8	24.5	23.7	21.1	21.7	22.2	19.7	20.9	22.6
9	21.9	23.1	24.4	20.8	21.1	21.5	21.1	22.4	24.1
10	23.7	24.8	25.3	21.1	22.4	23.9	22.3	23.0	24.4
11	23.4	23.4	24.0	22.6	23.4	24.3	22.5	23.6	24.6
12	23.1	24.3	**25.8**	22.6	22.4	22.6	22.7	24.1	**25.3**
13	24.7	25.5	24.7	20.6	19.9	20.2	23.5	23.9	24.6
14	22.9	23.6	24.6	*18.0*	18.5	19.8	22.9	23.2	23.5
15	23.7	24.3	25.2	18.2	18.7	19.5	22.0	20.4	20.3
16	23.6	23.9	24.2	18.2	19.2	21.1	18.3	19.4	20.5
17	21.7	22.6	22.7	19.8	20.0	21.5	18.6	19.5	20.3
18	21.3	22.3	23.3	19.8	20.7	22.4	19.3	20.4	21.0
19	21.8	21.5	22.6	20.4	21.2	23.0	18.7	18.6	18.8
20	*20.3*	20.7	21.8	21.5	22.4	24.2	16.9	17.6	18.0
21	20.5	21.4	22.5	22.8	22.6	22.8	17.9	18.2	18.2
22	20.8	22.3	22.3	21.8	22.9	24.3	17.8	17.6	17.0
23	21.8	22.6	23.6	22·8	23.6	**25.4**	*16.8*	17.4	17.6
24	23.2	22.3	22.2	23.8	24.3	23.4	17.1	17.5	18.2
25	20.6	21.1	22.0	22.0	22.8	23.5	16.9	17.6	17.8
26	21.3	21.9	22.4	22.0	22.6	23.1	16.9	17.8	18.7
27	21.3	22.4	22.4	21.6	22.8	23.7	18.1	18.5	18.6
28	21.2	22.6	22.4	22.4	23.4	24.5	17.9	18.4	18.4
29	22.3	24.6	22.0				17.4	18.4	19.0
30	20.8	22.0	22.8				17.2	18.4	19.1
31	21.2	22.0	23.2				18.0	19.0	19.3
1–10	22.94	23.76	24.72	21.13	21.68	22.22	21.45	22.15	22.87
11–20	22.65	23.21	23.89	20.17	20.64	21.86	20.54	21.07	21.69
21–31	21.36	22.29	22.54	22.40	23.12	23.84	17.45	18.07	18.35
Promedio.	22.29	23.06	23.68	21.15	21.72	22.55	19.74	20.35	20.89

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. VIII, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	18.3	19.4	20.0	14.5	15.2	15.8	11.7	12.0	11.6
2	19.2	20.4	**21.0**	15.0	15.4	16.1	10.6	11.3	11.3
3	20.6	20.2	19.7	14.5	15.0	15.8	9.1	9.8	10.4
4	18.6	18.1	17.8	14.0	14.3	15.1	8.7	9.9	10.8
5	16.7	17.6	18.1	14.4	15.4	16.4	9.3	9.8	10.2
6	16.5	17.6	18.7	15.5	16.1	16.6	9.7	9.9	9.8
7	17.0	18.4	19.6	14.3	14.1	13.8	9.4	9.3	9.0
8	18.6	19.0	19.5	11.6	12.3	13.0	8.3	8.9	9.1
9	17.7	17.9	18.0	11.1	11.8	12.7	7.7	8.4	8.9
10	16.6	17.1	16.8	10.7	11.2	11.7	5.9	7.5	8.2
11	15.3	14.9	14.8	*9.5*	10.5	11.7	6.9	7.9	8.3
12	*12.5*	12.6	13.4	*9.5*	10.6	11.8	7.6	8.7	9.6
13	12.7	13.4	14.1	10.2	10.7	11.6	9.2	9.6	9.6
14	13.7	14.8	15.7	10.1	11.2	12.3	9.4	9.9	9.0
15	15.4	16.2	17.0	10.9	11.8	12.5	7.2	8.1	9.0
16	14.6	15.9	17.2	10.3	11.3	12.3	7.5	8.4	9.1
17	15.2	15.6	17.6	10.1	11.4	12.4	7.2	8.0	9.2
18	15.6	17.0	18.3	10.5	11.9	13.2	8.9	8.9	8.7
19	16.3	17.6	18.8	12.0	13.1	14.2	7.2	8.6	9.2
20	18.1	18.6	18.9	12.7	13.6	14.2	8.5	8.6	8.3
21	17.4	16.5	15.8	13.8	15.1	16.2	6.2	6.8	7.4
22	15.1	14.8	14.9	15.6	15.2	14.2	5.2	5.8	6.8
23	14.0	14.4	14.2	12.0	12.3	12.5	*5.1*	6.3	7.7
24	13.4	13.7	14.0	10.2	11.2	12.4	5.9	7.2	8.8
25	*12.5*	13.0	13.8	10.5	11.9	13.2	7.5	9.1	10.7
26	12.9	13.7	14.6	11.2	12.6	13.9	10.4	11.6	12.4
27	13.0	13.8	14.8	11.7	13.0	15.0	12.0	12.7	**13.4**
28	13.8	14.6	15.4	13.6	15.0	16.5	12.2	12.3	11.9
29	14.7	15.1	15.9	15.4	16.4	**17.4**	10.3	10.4	10.5
30	15.3	15.6	15.7	16.7	16.7	16.0	8.7	9.4	9.8
31				13.6	13.5	13.1			
1–10	17.98	18.57	18.92	13.56	14.08	14.70	9.04	9.68	9.93
11–20	14.94	15.66	16.58	10.58	11.61	12.62	7.96	8.67	9.00
21–31	14.21	14.52	14.91	13.12	13.90	14.58	8.35	9.16	9.94
Promedio.	15.71	16.25	16.80	12.44	13.22	13.99	8.45	9.17	9.62

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. VIII, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	9.0	10.0	10.5	12.7	13.0	12.9	16.4	19.5	20.4
2	8.4	9.3	10.1	10.2	11.0	12.2	17.8	19.4	19.8
3	7.9	8.9	9.7	9.7	10.6	11.6	17.3	20.1	21.4
4	7.7	9.2	10.4	*9.3*	10.6	12.0	19.3	20.7	20.6
5	8.0	9.3	10.3	9.6	10.8	11.7	18.5	19.7	19.8
6	8.0	9.2	9.9	10.2	10.9	11.6	18.4	18.3	18.2
7	7.9	8.6	9.7	9.4	10.4	11.6	16.8	17.4	17.8
8	8.4	9.0	8.5	10.1	11.8	13.2	16.6	17.0	16.4
9	6.6	7.0	7.2	12.7	13.4	13.6	13.7	16.4	17.3
10	4.5	5.2	6.2	10.6	11.8	13.1	14.6	17.5	18.3
11	4.3	5.0	6.0	10.9	12.6	14.1	14.7	18.1	19.4
12	*4.2*	5.6	6.8	12.6	13.4	13.6	17.1	20.4	21.1
13	4.6	6.0	7.4	10.8	12.3	13.5	18.4	21.0	**22.0**
14	5.1	6.4	8.3	11.1	11.9	12.4	18.8	20.5	20.3
15	6.7	8.1	9.4	9.8	11.1	12.0	17.4	19.5	19.8
16	7.0	8.1	9.2	9.5	11.6	13.4	16.6	19.2	19.8
17	7.6	9.1	10.1	12.7	13.7	13.6	16.9	18.4	18.3
18	9.4	10.4	11.4	10.5	12.1	12.9	16.6	16.8	16.8
19	10.3	11.6	13.1	10.7	12.4	12.6	15.4	14.2	12.5
20	10.9	12.0	12.4	9.6	11.8	12.6	9.0	9.6	9.2
21	11.3	11.7	12.1	9.5	11.7	12.4	*7.5*	10.4	11.4
22	10.5	11.4	11.7	9.4	11.8	13.0	9.5	12.2	12.9
23	10.1	11.0	12.3	9.9	12.4	13.5	11.0	13.3	14.0
24	10.8	12.4	13.6	10.4	13.0	14.0	12.8	13.0	12.7
25	12.2	13.2	13.7	11.6	14.5	15.9	11.7	12.4	11.6
26	11.4	12.3	13.7	14.2	15.9	15.6	11.3	12.7	12.8
27	13.1	14.5	**16.0**	12.5	15.4	16.2	11.2	13.7	14.6
28	14.5	14.2	13.4	13.3	16.2	17.2	12.4	14.8	15.6
29	11.0	11.8	12.4	14.0	16.9	17.7	14.2	16.5	16.6
30	10.5	11.8	13.7	14.8	17.2	18.0	15.4	15.2	14.9
31	11.7	14.2	14.0	15.5	18.0	**18.6**			
1-10	7.64	8.57	9.25	10.45	11.43	12.35	16.94	18.60	19.00
11-20	7.01	8.23	9.41	10.82	12.29	13.07	16.09	17.77	17.92
21-31	11.55	12.59	13.33	12.28	14.82	15.65	11.70	13.42	13.71
Promedio.	8.83	9.89	10.75	11.22	12.91	13.75	14.91	16.60	16.88

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. VIII, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	14.2	14.2	14.4	20.0	23.0	23.6	*18.9*	24.1	23.4
2	13.8	16.0	16.6	21.4	23.9	23.6	20.6	25.4	24.6
3	14.9	16.8	17.4	21.2	24.4	25.2	21.8	26.1	25.2
4	13.8	15.2	14.8	22.9	25.1	25.5	22.2	26.0	26.0
5	*12.4*	14.6	15.2	23.3	23.4	22.3	23.5	27.6	27.5
6	12.9	15.1	15.6	20.3	21.3	20.9	25.4	28.8	28.7
7	13.7	16.6	17.6	19.4	21.5	21.5	24.7	24.9	23.4
8	15.6	17.9	18.4	19.7	22.6	23.2	20.5	23.8	23.6
9	16.5	17.9	18.2	21.3	21.6	20.1	21.7	25.7	25.8
10	16.3	18.4	18.8	18.4	18.3	17.1	23.8	26.6	27.0
11	16.5	18.7	19.4	15.4	15.7	15.2	25.8	25.4	25.0
12	16.9	19.4	19.8	*14.6*	15.6	16.0	23.0	27.1	27.2
13	18.0	18.2	18.2	15.5	19.0	19.5	24.8	28.6	27.0
14	16.8	19.2	19.4	17.1	20.8	21.5	24.4	26.7	25.9
15	17.1	19.3	20.1	19.4	23.1	24.3	23.4	27.3	26.8
16	17.9	20.7	21.8	22.5	25.5	24.6	24.4	27.6	27.8
17	19.6	22.7	**24.0**	21.1	25.2	25.1	25.3	27.3	27.8
18	19.7	20.6	20.2	21.8	25.7	25.9	25.7	29.5	28.6
19	17.9	19.8	19.7	23.6	26.8	**26.9**	25.5	28.8	28.8
20	18.7	21.7	21.4	24.2	27.2	24.6	26.9	**30.2**	30.0
21	17.6	20.0	20.2	22.4	25.1	24.6	27.4	28.0	28.0
22	17.4	20.8	21.6	22.5	24.4	21.6	25.6	29.3	29.6
23	19.3	22.1	22.2	20.1	22.9	22.4	27.3	26.7	25.6
24	19.3	20.9	21.1	20.4	22.5	22.6	24.0	27.1	27.0
25	17.5	20.8	21.6	20.6	23.3	22.2	24.9	28.3	26.6
26	18.8	22.3	23.3	19.8	23.7	23.0	24.4	29.2	29.7
27	21.1	22.3	22.8	21.0	23.5	22.2	27.4	27.7	24.8
28	20.3	22.8	23.5	20.5	23.8	22.7	21.3	23.4	22.6
29	21.1	20.8	21.2	20.6	21.1	20.2	20.5	23.7	24.2
30	19.5	21.0	21.0	18.2	22.1	21.4	21.4	26.2	26.5
31	18.6	21.7	22.5				23.7	24.5	22.5
1–10	14.41	16.27	16.70	20.79	22.51	22.30	22.31	25.90	25.52
11–20	17.91	20.03	20.40	19.52	22.46	22.36	24.92	27.85	27.49
21–31	19.14	21.41	21.91	20.61	23.24	22.29	24.35	26.74	26.10
Promedio.	17.22	19.31	19.74	20.31	22.74	22.32	23.88	26.83	26.36

TEMPERATURA DEL SUELO

(Á 36 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. IX, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.5	23.4	23.5	22.3	22.6	22.5	23.3	23.2	23.0
2	23.7	23.4	23.5	22.5	22.3	22.2	22.8	22.5	22.2
3	23.9	23.7	23.6	22.0	21.8	21.9	22.0	21.7	21.7
4	23.4	23.0	23.0	22.1	22.0	22.2	21.9	21.7	22.0
5	23.0	22.8	23.0	22.2	22.0	22.1	22.6	22.6	22.8
6	23.5	23.4	23.5	22.3	22.1	22.2	23.3	23.4	23.3
7	23.7	23.4	23.5	22.3	22.2	22.2	22.9	22.4	22.3
8	24.0	23.8	23.8	22.2	22.0	22.1	22.2	21.8	21.8
9	23.6	23.2	23.2	22.2	22.0	21.9	22.2	22.1	22.3
10	23.6	23.6	23.8	22.0	21.9	22.2	22.8	22.7	22.9
11	24.0	23.8	23.7	22.7	22.7	22.9	23.2	23.0	23.2
12	23.7	23.5	23.8	23.1	23.0	22.8	23.5	23.3	23.5
13	24.3	24.2	**24.4**	22.7	22.3	21.9	**23.8**	23.7	23.7
14	24.2	23.8	23.9	21.5	20.9	20.7	**23.8**	23.6	23.5
15	24.0	23.9	24.1	20.8	20.5	20.6	23.5	23.1	22.6
16	24.4	24.1	24.0	20.4	*20.1*	20.3	22.0	21.3	21.2
17	24.0	23.7	23.5	20.7	20.7	20.8	21.3	20.9	20.8
18	23.1	22.9	23.0	21.0	20.8	21.0	21.0	20.8	21.0
19	23.2	22.9	22.7	21.4	21.2	21.4	21.0	20.6	20.4
20	22.4	22.0	22.0	21.8	21.7	21.9	20.1	19.6	19.5
21	22.0	*21.8*	22.0	22.5	22.5	22.8	19.5	19.4	19.4
22	22.3	22.1	22.3	22.5	22.4	22.5	19.3	19.2	19.0
23	22.6	22.5	22.7	22.9	22.8	23.0	18.8	18.6	18.6
24	23.1	23.0	22.9	**23.5**	23.4	**23.5**	18.6	18.5	18.6
25	22.6	22.3	22.2	23.2	22.9	22.9	18.7	18.5	18.6
26	22.4	22.3	22.3	22.9	22.7	22.8	18.6	*18.4*	18.6
27	22.5	22.4	22.4	22.8	22.5	22.7	18.9	18.9	19.0
28	22.5	22.5	22.7	22.8	22.5	22.8	19.1	19.0	19.0
29	22.8	23.0	23.0				19.0	18.8	18.9
30	22.8	22.8	22.5				19.0	18.8	18.9
31	22.6	22.4	22.5				19.2	19.0	19.2
1–10	23.59	23.37	23.44	22.21	22.09	22.15	22.60	22.41	22.43
11–20	23.73	23.48	23.51	21.61	21.39	21.43	22.32	21.99	21.94
21–31	22.56	22.46	22.50	22.89	22.71	22.88	18.97	18.83	18.89
Promedio.	23.27	23.08	23.13	22.19	22.02	22.10	21.22	21.00	21.02

TEMPERATURA DEL SUELO

(Á 36 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. IX, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	19.4	19.2	19.4	16.1	15.9	16.0	**14.6**	14.2	13.9
2	19.7	19.7	19.9	16.1	16.0	16.1	13.5	13.1	12.8
3	20.3	**20.4**	**20.4**	16.2	16.0	16.0	12.7	12.2	12.0
4	20.2	19.9	19.6	16.1	15.8	15.7	11.8	11.5	11.4
5	19.3	18.9	18.8	15.8	15.7	15.8	11.6	11.3	11.3
6	18.9	18.6	18.6	16.2	16.1	16.2	11.3	11.3	11.3
7	18.8	18.6	18.8	**16.4**	16.1	15.8	11.2	11.1	11.0
8	19.0	19.2	19.3	15.4	14.8	14.5	10.8	10.6	10.5
9	19.5	19.2	19.1	14.4	14.0	13.8	10.5	10.2	10.1
10	18.9	18.6	18.5	13.8	13.5	13.3	10.1	9.7	9.6
11	18.4	17.9	17.6	13.2	12.8	12.6	9.6	9.4	9.4
12	17.1	16.5	16.2	12.7	12.4	12.4	9.5	9.4	9.6
13	16.1	15.8	15.7	12.6	12.4	12.4	9.9	10.0	10.1
14	15.9	15.9	16.0	12.5	*12.3*	12.4	10.0	10.0	10.0
15	16.4	16.5	16.7	12.7	12.6	12.6	9.9	9.6	9.6
16	17.0	16.7	16.8	12.8	12.5	12.5	9.5	9.5	9.5
17	17.1	16.9	17.1	12.7	12.4	*12.3*	9.6	9.3	9.3
18	17.4	17.2	17.4	12.6	12.4	12.4	9.6	9.6	9.7
19	17.8	17.5	17.7	12.9	12.8	13.0	9.6	9.4	9.3
20	18.2	18.2	18.4	13.4	13.4	13.5	9.6	9.6	9.6
21	18.6	18.3	18.0	13.9	14.0	14.3	9.4	9.0	8.8
22	17.5	17.2	16.9	14.8	14.9	15.0	8.7	8.3	8.1
23	16.6	16.9	16.4	14.7	14.3	14.0	8.1	*7.8*	7.9
24	16.0	15.7	15.6	13.7	13.1	13.0	8.1	8.0	8.1
25	15.5	15.2	15.1	13.0	12.7	12.8	8 6	8.6	8.9
26	15.1	*15.0*	*15.0*	13.1	12.9	13.0	9.6	9.8	10.2
27	15.2	15.0	15.1	13.3	13.1	13 2	10.9	11.1	11.4
28	15.3	15.3	15.4	13.8	13.9	14.2	11.9	11.9	12.0
29	15.7	15.7	15.8	14.8	14.9	15.2	11.9	11.6	11.5
30	16.0	16.0	16.1	15.7	15.8	16.0	11.2	10.8	10.7
31									
1–10	19.40	19.23	19.24	15.65	15.39	15.32	11.81	11.52	11.39
11–20	17.14	16.91	16.96	12.81	12.60	12.61	9.68	9.58	9.61
21–31	16.15	16.03	15.94	14.25	14.09	14.15	9.84	9.69	9.76
Promedio.	17.56	17.39	17.38	14.24	14.03	14.03	10.44	10.26	10 25

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. IX, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	10.7	10.5	10.6	13.1	13.0	13.1	16.5	16.4	16.9
2	10.7	10.4	10.4	12.9	12.4	12.2	17.5	17.4	17.6
3	10.4	10.1	10.1	12.3	11.9	11.8	17.8	17.5	17.9
4	10.0	9.8	9.8	11.8	11.4	11.5	18.5	18.4	18.7
5	10.1	9.8	9.9	11.7	11.4	11.5	18.8	18.6	18.6
6	10.1	9.8	9.8	11.7	11.5	11.5	18.7	18.5	18.4
7	10.0	9.7	9.7	11.6	11.3	*11.3*	18.1	17.8	17.7
8	9.9	9.8	9.7	11.5	11.3	11.6	17.7	17.4	17.3
9	9.6	9.3	9.0	12.2	12.4	12.6	17.0	16.4	16.5
10	8.7	8.1	7.9	12.7	12.3	12.3	16.6	16.3	16.7
11	7.8	7.4	7.3	12.5	12.2	12.4	16.9	16.5	16.9
12	7.4	7.1	*7.1*	12.8	12.8	13.0	17.5	17.4	18.0
13	7.4	7.1	7.2	13.0	12.5	12.6	18.6	18.4	18.8
14	7.5	7.2	7.3	12.8	12.5	12.5	**19.3**	19.0	19.2
15	7.9	7.8	8.1	12.4	12.0	12.0	19.1	18.6	18.7
16	8.5	8.3	8.4	12.1	11.7	11.9	18.8	18.2	18.4
17	8.7	8.6	8.9	12.4	12.5	12.8	18.6	18.2	18.3
18	9.3	9.4	9.7	12.9	12.5	12.5	18.2	17.9	17.7
19	10.2	10.2	10.5	12.6	12.3	12.4	17.5	17.1	16.5
20	11.1	11.0	11.1	12.4	12.0	12.1	15.7	14.7	13.9
21	11.5	11.4	11.4	12.2	11.8	11.8	13.1	*12.4*	12.5
22	11.5	11.3	11.4	12.0	11.6	11.8	12.7	*12.4*	12.7
23	11.5	11.2	11.2	12.2	11.8	12.0	13.2	13.0	13.3
24	11.5	11.3	11.6	12.4	12.1	12.4	13.8	13.7	13.7
25	12.1	12.1	12.3	12.8	12.6	13.0	13.6	13.5	13.4
26	12.5	12.2	12.2	13.7	13.8	14.1	13.3	13.1	13.3
27	12.6	12.7	13.1	14.3	13.9	14.2	13.5	13.2	13.6
28	13.7	**13.8**	13.7	14.5	14.2	14.5	14.1	13.9	14.3
29	13.4	12.9	12.8	15.0	14.8	15.1	14.9	14.9	15.4
30	12.7	12.3	12.4	15.6	15.3	15.6	15.8	15.8	15.7
31	12.8	12.6	12.8	16.0	15.8	**16.1**			
1-10	10.02	9.73	9.69	12.15	11.89	11.94	17.72	17.47	17.63
11-20	8.58	8.41	8.56	12.59	12.30	12.42	18.02	17.60	17.64
21-31	12.35	12.16	12.26	13.70	13.43	13.69	13.80	13.59	13.79
Promedio.	10.38	10.17	10.24	12.84	12.57	12.72	16.51	16.22	16.35

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. IX, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	15.6	15.4	15.2	21.3	21.1	21.6	21.1	*20.8*	21.4
2	15.2	15.0	15.5	22.1	21.9	22.3	21.8	21.6	22.3
3	15.8	15.7	16.0	22.5	22.1	22.7	22.6	22.4	23.0
4	16.3	15.8	15.8	23.2	23.0	23.4	23.3	23.0	23.4
5	15.5	14.9	15.1	23.7	23.5	23.3	23.8	23.6	24.3
6	15.2	*14.8*	15.1	22.8	22.3	22.2	24.8	24.7	25.3
7	15.3	15.1	15.6	21.8	21.4	21.5	25.7	25.2	24.8
8	16.1	16.0	16.5	21.6	21.2	21.7	24.0	23.3	23.3
9	17.0	16.9	17.2	22.2	22.0	21.9	23.3	23.0	23.5
10	17.4	17.2	17.7	21.4	20.8	20.5	24.0	23.9	24.6
11	18.0	17.7	18.1	19.8	19.1	18.7	24.9	24.9	24.8
12	18.4	18.1	18.5	18.2	17.9	17.7	24.4	24.1	24.7
13	18.9	18.7	18.6	*17.7*	17.7	18.3	25.0	24.8	25.4
14	18.4	18.1	18.5	18.9	18.7	19.4	25.4	25.0	25.2
15	18.6	18.3	18.6	20.1	20.0	20.9	25.1	24.6	25.1
16	19.0	18.8	19.3	21.8	21.8	22.4	25.3	25.0	25.4
17	19.9	19.8	20.5	23.0	22.1	22.7	25.7	25.5	25.8
18	21.1	20.7	20.6	23.0	22.7	23.3	26.0	26.2	26.8
19	20.2	19.7	19.7	23.7	23.5	24.2	26.6	26.2	26.5
20	19.8	19.6	20.2	**24.6**	24.3	24.5	26.7	26.5	27.0
21	20.3	19.7	19.9	24.2	23.7	23.9	**27.3**	27.0	26.8
22	19.9	19.9	19.9	23.8	23.4	23.5	26.8	26.4	26.8
23	20.3	20.1	20.9	22.7	22.2	22.3.	27.1	26.9	26.6
24	20.8	20.5	20.7	22.3	21.9	22.1	26.1	25.6	25.8
25	20.6	20.0	20.3	22.2	11.8	22.1	25.9	25.6	26.0
26	20.7	20.4	20.9	22.0	21.6	22.0	25.9	25.6	26.2
27	21.5	21.3	21.5	22.2	22.0	22.2	26 8	26.7	26.6
28	21.6	21.2	21.6	22.1	21.7	22.1	25.7	24.8	24.5
29	**22.1**	21.7	21.5	22.1	21.8	21.6	24.1	23.5	23.6
30	21.3	20.9	21.0	21.2	20.8	21.0	23.8	23.4	23.9
31	20.9	20.5	20.9				24.5	24.3	24.2
1-10	15.94	15.68	15.97	22.26	21.93	22.11	23.44	23.15	23.59
11-20	19.23	18.95	19.26	21.08	20.78	21.21	25.51	25.28	25.67
21-31	20.91	20.56	20.83	22.48	22.09	22.28	25.82	25.44	25.55
Promedio.	18.76	18.47	18.75	21.94	21.60	21.87	24.95	24.65	24.95

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. X, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	*21.8*	22.0	22.0	22.0	22.0	22.0	22.2	22.2	22.2
2	22.1	22.2	22.2	22.0	22.0	22.0	22.2	22.2	22.2
3	22.2	22.3	22.4	21.9	21.8	21.8	22.0	22.0	21.8
4	22.4	22.4	22.3	21.7	21.7	21.7	21.8	21.6	21.6
5	22.2	22.1	22.1	21.8	21.8	21.8	21.7	21.8	21.8
6	22.1	22.2	22.2	21.8	21.8	21.8	22.0	22.1	22.2
7	22.3	22.3	22.3	21.8	21.8	21.8	22.2	22.2	22.2
8	22.4	22.4	22.5	21.8	21.8	21.8	22.0	22.0	21.8
9	22.6	22.5	22.4	21.8	21.8	21.8	21.8	21.8	21.8
10	22.4	22.4	22.4	21.7	21.6	21.6	21.8	21.9	22.0
11	22.6	22.6	22.6	21.7	21.8	21.9	22.0	22.1	22.2
12	22.6	22.6	22.6	22.0	22.1	22.1	22.2	22.3	22.3
13	22.6	22.7	22.8	22.1	22.1	22.0	22.4	22.5	22.6
14	22.9	22.9	22.9	21.9	21.8	21.6	22.6	22.6	**22.7**
15	22.8	22.8	22.8	21.4	21.3	21.2	**22.7**	22.6	22.6
16	22.9	23.0	23.0	21.0	21.0	20.9	22.4	22.2	22.0
17	**23.0**	23.0	23.0	*20.8*	*20.8*	20.9	21.8	21.7	21.6
18	22.8	22.7	22.6	21.0	21.1	21.1	21.4	21.4	21.3
19	22.5	22.5	22.5	21.1	21.2	21.2	21.2	21.2	21.1
20	22.4	22.3	22.2	21.2	21.3	21.5	21.0	20.8	20.7
21	22.0	22.0	22.0	21.5	21.6	21.7	20.5	20.4	20.3
22	21.8	21.8	21.8	21.6	21.6	21.7	20.2	20.2	20.0
23	21.8	21.9	21.9	21.7	21.8	21.8	20.0	19.8	19.7
24	22.0	22.1	22.2	21.9	22 0	22.1	19.6	19.5	19.5
25	22.2	22.2	22.1	22.2	22.2	**22.2**	19.4	19.4	19.4
26	22.0	22.0	22.0	**22.2**	22.2	22.2	19 3	19.2	19.2
27	21.9	21.9	*21.8*	22.1	22.1	22.1	*19.2*	19.2	19.2
28	*21.8*	21.9	22.0	22.0	22.1	22.2	19.3	19.4	19.3
29	22.0	22.0	22.1				19.3	19.3	19.2
30	22.2	22.2	22.2				19.2	19.2	19.3
31	22.1	22.1	22.1				19.2	19.2	19.2
1-10	22.25	22.28	22.28	21.83	21.81	21.81	21.97	21.98	21.96
11-20	22.71	22.71	22.69	21.42	21.45	21.44	21.97	21.94	21.91
21-31	21.98	22.01	22.02	21.90	21.95	22.00	19.56	19.53	19.48
Promedio.	22.30	22.32	22.35	21.63	21.72	21.73	21.12	21.10	21.06

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. X, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	19.3	19.3	19.4	16.4	16.4	16.4	**15.2**	15.1	15.0
2	19.4	19.4	19.5	16.4	16.4	**16.6**	14.8	14.6	14.4
3	19.6	19.6	19.8	16.4	16.5	16.5	14.2	14.0	13.8
4	**19.8**	19.8	19.8	16.5	16.4	16.4	13.6	13.4	13.2
5	19.7	19.6	19.5	16.4	16.3	16.2	13.1	13.0	13.0
6	19.4	19.3	19.2	16.3	16.4	16.4	12.8	12.8	12.7
7	19.2	19.1	19.1	16.5	16.5	16.4	12.6	12.6	12.5
8	19.2	19.2	19.2	16.4	16.2	16.1	12.4	12.3	12.2
9	19.2	19.3	19.2	15.9	15.8	15.6	12.1	12.0	11.9
10	19.3	19.2	19.2	15.4	15.3	15.2	11.8	11.7	11.6
11	19.0	19.0	18.8	15.0	14.9	14.7	11.4	11.4	11.2
12	18.6	18.4	18.3	14.6	14.4	14.4	11.2	11.1	11.0
13	18.0	17.8	17.6	14.2	14.2	14.0	11.0	11.1	11.1
14	17.4	17.4	17.2	14.0	14.0	14.0	11.1	11.2	11.2
15	17.2	17.3	17.2	13.9	13.8	13.8	11.2	11.1	11.0
16	17.4	17.4	17.4	13.8	13.8	13.8	11.0	11.0	10.8
17	17.4	17.5	17.4	13.8	13.8	13.7	10.8	10.8	10.8
18	17.6	17.6	17.6	13.7	13.6	*13.6*	10.7	10.7	10.7
19	17.6	17.7	17.7	*13.6*	13.6	13.7	10.7	10.7	10.6
20	17.8	17.9	18.0	13.8	13.8	13.9	10.6	10.6	10.6
21	18.0	18.1	18.2	14.0	14.1	14.2	10.6	10.6	10.5
22	18.1	18.0	17.8	14.4	14.5	14.6	10.4	10.3	10.2
23	17.7	17.5	17.4	14.8	14.8	14.8	10.0	9.9	9.8
24	17.2	17.1	17.0	14.7	14.5	14.4	9.7	9.7	9.6
25	16.8	16.8	16.7	14.3	14.1	14.0	*9.6*	9.6	9.7
26	15.5	16.4	16.3	14.0	13.9	14.0	9.8	10.0	10.1
27	16.2	16.2	16.2	13.9	13.9	14.0	10.4	10.6	10.8
28	*16.1*	16.2	16.2	14.0	14.0	14.2	11.1	11.3	11.4
29	16.2	16.2	16.3	14.3	14.4	14.6	11.7	11.8	11.8
30	16.3	16.3	16.4	14.8	14.9	15.2	11.8	11.7	11.6
31				15.3	15.4	15.3			
1-10	19.41	19.38	19.39	16.26	16.22	16.18	13.26	13.15	13.03
11-20	17.80	17.80	17.72	14.04	13.99	13.96	10.97	10.97	10.90
21-31	16.81	16.88	16.85	14.41	14.41	14.48	10.51	10.55	10.55
Promedio.	18.01	18.02	17.99	14.89	14.86	14.86	11.58	11.56	11.49

TEMPERATURA DEL SUELO

(Á 66 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. X, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	11.6	11.5	11.4	12.7	12.7	12.8	15.0	15.1	15.3
2	11.4	11.4	11.4	12.8	12.8	12.8	15.5	15.6	15.8
3	11.3	11.2	11.2	12.7	12.6	12.5	16.0	16.1	16.2
4	11.1	11.0	11.0	12.4	12.3	12.3	16.4	16.6	16.7
5	10.9	10.9	10.8	12.2	12.2	12.1	16.9	17.0	17.1
6	10.9	10.8	10.8	12.1	12.1	12.0	17.2	17.2	17.2
7	10.8	10.8	10.8	12.0	12.0	12.0	17.2	17.2	17.2
8	10.7	10.7	10.6	*11.9*	11.9	11.9	17.1	17.0	17.0
9	10.6	10.6	10.5	12.0	12.1	12.2	16.9	16.8	16.7
10	10.4	10.3	10.0	12.3	12.4	12.4	16.6	16.5	16.4
11	9.8	9.7	9.5	12.4	12.5	12.5	16.4	16.4	16.4
12	9.4	9.2	9.1	12.5	12.6	12.6	16.5	16.6	16.8
13	9.0	9.0	9.0	12 7	12.8	12.8	16.9	17.1	17.2
14	8.9	8.8	*8.8*	12.7	12.8	12.8	17.4	17.6	17.8
15	8.8	8.9	8.9	12.7	12.7	12.6	17.8	17.9	**17.9**
16	9.0	9.1	9.2	12.5	12.5	12.4	**17.9**	17.9	17.8
17	9.2	9.3	9.4	12.4	12.4	12.7	17.8	17.8	17.8
18	9.4	9.5	9.6	12.6	12.7	12.7	17.8	17.7	17.6
19	9.8	9.9	10.1	12.7	12.7	12.7	17.6	17.5	17.3
20	10.3	10.4	10.6	12.7	12.6	12.6	17.2	16.9	16.5
21	10.8	10.9	11.0	12.6	12.5	12.5	16.0	15.6	15.3
22	11.1	11.2	11.2	12.4	12.4	12.4	14.9	14.7	14.6
23	11.3	11.3	11.3	12.4	12.4	12.4	14.4	14.4	14.4
24	11.4	11.4	11.4	12.4	12.4	12.4	14.4	14.4	14.5
25	11.5	11.6	11.7	12.5	12.6	12.6	14.5	14.5	14.4
26	11.9	11.9	12.0	12.8	13.0	13.0	14.4	14.3	14.2
27	12.0	12.1	12.2	13.3	13.4	13.5	14.2	*14.2*	14.2
28	12.4	12.6	12.7	13.6	13.7	13.7	14.2	14.4	14.4
29	12.9	**12.9**	12.9	13.9	14.0	14.1	14.6	14.8	15.0
30	12.8	12.7	12.6	14.3	14.4	14.4	15.1	15.2	15.4
31	12.6	12.6	12.7	14.6	14.7	**14.8**			
1–10	10.97	10.92	10.85	12.31	12.31	12.30	16.48	16.51	16.56
11–20	9.36	9.38	9.42	12.59	12.63	12.64	17.33	17.34	17.31
21–31	11.88	11.93	11.97	13.16	13.23	13.25	14.67	14.65	14.64
Promedio.	10.77	10.78	10.79	12.70	12.74	12.75	16.16	16.17	16.17

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. X, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	15.5	15.5	15.4	20.3	20.4	20.4	*21.0*	21.0	21.0
2	15.4	*15.4*	15.4	20.5	20.6	20.6	21.0	21.0	21.1
3	15.4	15.4	15.6	20.9	21.0	21.0	21.3	21.4	21.5
4	15.7	15.8	15.8	21.2	21.3	21.4	21.7	21.8	21.8
5	15.8	15.7	15.6	21.6	21.7	21.8	22.0	22.1	22.2
6	15.5	15.4	15.4	21.8	21.8	21.6	22.4	22.6	22.8
7	*15.4*	15.4	15.4	21.5	21.4	21.2	23.0	23.2	23.3
8	15.5	15.6	15.8	21.1	21.0	21.0	23.2	23.1	22.9
9	16.0	16.1	16.4	21.0	21.1	21.1	22.7	22.6	22.6
10	16.5	16.6	16.7	21.1	21.0	20.8	22.6	22.6	22.7
11	16.9	17.0	17.1	20.6	20.4	20.1	22.8	23.0	23.1
12	17.2	17.4	17.4	19.8	19.5	19.3	23.2	23.2	23.1
13	17.6	17.8	17.8	19.0	18.9	*18.8*	23.2	23.2	23.3
14	17.9	17.9	17.8	18.8	18.8	18.8	23.4	23.5	23.6
15	17.9	17.9	17.8	19.1	19.2	19.4	23.6	23.6	23.6
16	18.0	18.1	18.2	19.7	19.9	20.2	23.6	23.6	23.6
17	18.3	18.5	18.6	20.5	20.6	20.8	23.7	23.8	23.8
18	19.0	19.2	19.3	21.0	21.1	21.2	24.0	24.3	24.6
19	19.4	19.3	19.2	21.4	21.5	21.7	24.5	24.6	24.6
20	19.2	19.2	19.2	22.0	22.1	22.2	24.6	24.6	24.7
21	19.3	19.3	19.3	22.4	22.4	**22.4**	24.9	25.0	25.0
22	19.3	19.2	19.2	22.4	22.4	22.3	25.1	25.0	25.0
23	19.3	19.4	19.4	22.2	22.1	22.0	25.1	25.1	**25.2**
24	19.6	19.6	19.8	21.8	21.7	21.6	25.1	25.0	24.9
25	19.8	19.8	19.8	21.6	21.5	21.4	24.8	24.7	24.7
26	19.8	19.8	19.8	21.4	21.4	21.4	24.7	24.6	24.6
27	20.0	20.1	20.2	21.4	21.4	21.4	24.7	24.8	24.8
28	20.3	20.3	20.4	21.4	21.4	21.4	25.0	24.8	24.7
29	20.5	20.6	**20.6**	21.4	21.3	21.4	24.4	24.2	23.9
30	**20.6**	20.6	20.5	21.3	21.2	21.0	33.7	23.6	23.5
31	20.4	20.4	20.3				23.6	23.6	23.6
1-10	15.66	15.69	15.75	21.10	21.13	21.09	22.09	22.14	22.19
11-20	18.14	18.23	18.24	20.19	20.20	20.25	23.66	23.74	23.80
21-31	19.90	19.92	19.94	21.73	21.68	21.63	24.65	24.58	24.54
Promedio.	17.96	18.01	18.04	21.01	21.00	20.99	23.50	23.52	23.54

TEMPERATURA DEL SUELO

(OBSERVADA Á LAS 2 P. Á 96 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. XI, 1.

FECHA	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO
1	*20.9*	**21.6**	21.6	19.5	16.9	**15.4**
2	21.0	21.6	21.7	19.5	**17.0**	15.4
3	21.2	21.6	21.6	19.5	17.0	15.1
4	21.2	21.5	21.5	**19.7**	17.0	14.9
5	21.2	**21.6**	21.4	19.7	16.9	14.5
6	21.2	21.6	21.5	19.6	16.9	14.3
7	21.3	21.6	21.6	**19.7**	16.9	14.1
8	21.4	21.6	21.6	19.4	16.8	13.9
9	21.5	21.6	21.5	19.4	16.7	13.7
10	21.6	21.5	21.5	19.4	16.5	13.4
11	21.6	21.4	21.6	19.3	16.2	13.2
12	21.7	21.5	21.6	19.2	16.0	12.9
13	21.7	21.6	21.7	18.9	15.7	12.7
14	21.8	21.6	21.8	18.6	15.4	12.6
15	21.9	21.4	**22.0**	18.4	15.2	12.6
16	**22.0**	21.2	**22.0**	18.2	15.1	12.5
17	22.0	21.0	21.8	18.1	15.0	12.4
18	22.0	21.0	21.6	18.1	14.9	12.2
19	22.0	*20.9*	21.4	18.1	*14.8*	12.2
20	21.9	*20.9*	21.2	18.1	14.8	12.1
21	21.8	21.0	21.0	18.2	14.8	12.1
22	21.6	21.1	20.7	18.2	14.9	12.0
23	21.6	21.1	20.5	18.1	15.1	11.8
24	21.6	21.2	20.3	17.9	15.2	11.6
25	21.6	21.4	20.1	17.7	15.1	11.4
26	21.6	21.5	19.9	17.5	15.0	*11.3*
27	21.6	21.5	19.8	17.3	*14.8*	11.5
28	21.6	21.5	19.8	17.2	14.8	11.7
29	21.6		19.6	*17.0*	14.8	12.0
30	21.6		*19.6*	*17.0*	15.0	12.2
31	21.6		19.6		15.3	
1–10	21.25	21.58	21.55	19.54	16.86	14.47
11–20	21.86	21.25	21.67	18.50	15.31	12.54
21–31	21.62	21.29	20.08	17.61	14.98	11.76
Promedio	21.58	21.38	21.07	18.55	15.69	12.92

TEMPERATURA DEL SUELO

(OBSERVADA Á LAS 2 P. Á 96 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. XI, 2.

FECHA	JULIO	AGOSTO	SETIEMBRE	OCTUBRE	NOVIEMBRE	DICIEMBRE
1	12.2	12.8	*14.4*	*15.4*	19.6	*20.6*
2	12.2	12.9	14.6	15.5	19.6	20.6
3	12.2	12.9	15.0	15.5	19.8	20.6
4	12.1	12.9	15.3	15.6	20.0	20.8
5	12.0	12.8	15.7	15.7	20.2	21.0
6	11.9	12.6	16.0	15.7	20.4	21.2
7	11.9	12.6	16.2	15.6	20.5	21.4
8	11.8	12.6	16.3	15.7	20 4	21.7
9	11.8	*12.5*	16.3	15.8	20.3	21.7
10	11.6	12.6	16.2	16.1	20.3	21.7
11	11.4	12.7	16.2	16.4	20.2	21.7
12	11.1	12.8	16.2	16.6	19.9	21.8
13	10.8	12.9	16.3	16.9	19.5	22.0
14	10.6	13.0	16.6	17.2	19.2	22.1
15	10.5	13.0	16.8	17.3	*19.1*	22.2
16	*10.4*	13.0	17.0	17.4	19.2	22.3
17	10.5	12.9	17.1	17.6	19.5	22.4
18	10.5	12.9	**17.2**	17.9	19.8	22.6
19	10.6	13.0	17.2	18.2	20.1	22.8
20	10.8	13.0	17.1	18.4	20.4	22.9
21	11.1	13.0	16.7	18.4	20.7	23.2
22	11.4	12.9	16.1	18.6	**21.0**	23.4
23	11.6	12.9	15.6	18.6	21.0	23.4
24	11.7	12.9	15.4	18.8	21.0	**23.6**
25	11.8	12.9	15.3	18.9	20.9	23.5
26	12.0	13.0	15.2	19.0	20.8	23.5
27	12.1	13.2	15.1	19.1	20.8	23.5
28	12.3	13.4	15.0	19.2	20.8	23.6
29	12.6	13.6	15.0	19.4	20.8	23.5
30	**12.8**	13.8	15.2	**19.6**	20.8	23.2
31	12.8	**14.1**		**19.6**	20.8	23.0
1–10	11.97	12.72	15.60	15.66	20.11	21.13
11–20	10.72	12.92	16.77	17.39	19.69	22.28
21–31	12.02	13.25	15.46	19.02	20.86	23.40
Promedio	11.58	12.97	15.94	17.41	20.22	22.31

TEMPERATURA DEL SUELO

(OBSERVADA Á LAS 2 P. Á 126 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1886

Tab. XII, 1.

FECHA	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO
1	*20.0*	21.0	21.1	**19.7**	**17.5**	**15.7**
2	20.0	21.0	21.1	19.7	17.5	15.8
3	20.2	21.0	21.1	19.6	17.5	15.7
4	20.2	21.0	21.0	19.6	17.4	15.6
5	20.3	21.0	21.0	19.7	17.4	15.4
6	20.4	21.0	21.1	19.6	17.4	15.3
7	20.4	21.0	21.1	19.6	17.4	15.2
8	20.4	**21.1**	21.1	19.6	17.3	15.0
9	20.5	**21.1**	21.1	19.5	17.2	14.8
10	20.6	21.1	21.1	19.5	17.2	14.6
11	20.6	21.0	21.0	19.4	11.0	14.5
12	20.7	21.0	21.1	19.4	16.9	14.3
13	20.8	21.0	21.1	19.3	16.7	14.1
14	20.8	21.0	21.2	19.1	16.5	14.0
15	20.9	21.0	21.3	19.0	16.3	13.8
16	21.0	21.0	21.3	18.8	16.2	13.7
17	21.0	20.9	21.3	18.7	16.0	13.6
18	21.1	20.8	21.3	18.6	16.0	13.5
19	**21.1**	20.7	21.2	18.5	15.8	13.4
20	**21.1**	20.7	21.0	18.4	15.8	13.3
21	21.1	*20.6*	21.0	18.4	15.7	13.2
22	21.0	*20.6*	21.8	18.4	15.6	13.2
23	21.0	20.7	20.6	18.4	15.7	13.0
24	20.9	20.8	20.5	18.4	15.7	12.9
25	20.9	20.8	20.4	18.2	15.7	12.8
26	20.9	20.8	20.2	18.2	15.7	*12.6*
27	20.9	20.9	20.1	18.0	15.6	12.6
28	20.8	20.9	20.0	17.8	15.6	*12.6*
29	20.9		19.8	17.7	*15.5*	12.7
30	20.9		*19.8*	*17.6*	*15.5*	12.8
31	21.0		19.8		15.6	
1-10	20.30	21.03	21.08	19.61	17.38	15.31
11-20	20.91	20.91	21.18	18.92	16.32	13.82
21-31	20.94	20.76	20.27	18.11	15.63	12.84
Promedio	20.72	20.91	20.83	18.88	16.42	13.99

TEMPERATURA DEL SUELO

(OBSERVADA Á LAS 2 P. Á 126 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1886

Tab. XII, 2.

FECHA	JULIO	AGOSTO	SETIEMBRE	OCTUBRE	NOVIEMBRE	DICIEMBRE
1	12.9	13.0	*14.0*	*15.4*	*18.9*	*20.1*
2	**13.0**	13.0	14.2	15.5	18.9	20.1
3	**13.0**	13.1	14.4	15.5	19.0	20.1
4	12.9	13.1	14.7	15.6	19.1	20.1
5	12.9	13.1	14.9	15.6	19.2	20.2
6	12.8	13.1	15.2	15.7	19.4	20.3
7	12.8	13.0	15.4	15.7	19.5	20.4
8	12.7	13.0	15.6	15.7	19.6	20.6
9	12.7	13.0	15.7	15.7	19.6	20.8
10	12.6	13.0	15.8	15.8	19.6	20.8
11	12.5	13.0	15.8	16.0	19.6	20.7
12	12.2	13.0	15.8	16.2	19.5	20.8
13	12.0	13.1	15.8	16.3	19.4	21.0
14	12.0	13.1	16.0	16.5	19.4	21.2
15	11.9	13.2	16.1	16.7	19.0	21.2
16	11.8	13.2	16.3	16.8	19.0	21.3
17	11.7	13.2	16.4	16.9	19.0	21.4
18	11.6	13.2	16.6	17.1	19.1	21.5
19	*11.5*	**13.3**	16.6	17.6	19.3	21.6
20	11.6	13.3	**16.7**	17.5	19.5	21.7
21	11.7	12.3	16.6	17.7	19.7	22.2
22	11.8	12.3	16.4	17.8	19.9	22.2
23	11.9	12.3	16.1	17.9	20.0	22.3
24	12.0	*12.2*	15.9	18.0	**20.2**	22.3
25	12.1	12.2	15.7	18.1	20.1	22.4
26	12.3	12.2	15.6	18.2	20.1	22.4
27	12.4	12.3	15.5	18.3	20.1	22.4
28	12.5	12.4	15.4	18.6	20.2	22.5
29	12.6	12.5	15.3	18.7	20.2	22.5
30	12.8	12.7	15.3	18.7	20.2	**22.5**
31	12.9	12.8		**18.8**		22.4
1–10	12.83	13.04	14.99	15.62	19.28	20.34
11–20	11.88	13.16	16.21	16.76	19.28	21.24
21–31	12.27	12.38	15.78	18.25	20.07	22.37
Promedio	12.33	12.85	15.66	16.92	19.54	21.35

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1886

$\lambda = +4^h16^m48^s2$ Greenw.; $\varphi = -31°24'45''$; $H = 406^m$; $h_t = 2.3^m$: $h_r = 1.5^m$

Tab. XIII, 1

MESES	PRESION ATMOSFÉRICA 700 mm. +						TEMPERATURA DEL AIRE									
	7 a.	2 p.	9 p.	PROM.	MAX.	MIN.	7 a.	2 p.	9 p.	PROM.	MEDIAS Máx.	MEDIAS Min.	MAX. Absol.	FECHA	MIN. Absol.	FECHA
Enero	24.92	23.08	23.83	**23.94**	28.80	15.80	20.20	28.67	22.27	23.71	29.76	16.78	35.4	10	11.1	20
Febrero....	26.85	25.21	26.16	26.07	33.12	18.96	18.65	27.26	21.39	22.43	28.50	16.20	35.6	23	8.2	14
Marzo	26.90	25.31	26.61	26.29	31.50	18.49	15.75	26.18	18.93	20.29	27.23	14.38	35.8	12	8.2	20
Abril......	29.34	27.67	29.20	28.74	36.86	18.51	10.60	22.01	14.30	15.64	23.05	9.43	31.6	7	—0.1	12
Mayo......	28.79	27.22	28.96	28.32	36.15	19.08	5.36	22.10	10.90	12.79	22.96	4.50	31.6	27	—2.6	17
Junio......	30.00	28.69	30.79	29.83	38.25	21.03	3.35	15.66	6.84	**8.62**	16.48	2.20	25.1	25	—7.0	22
Julio	30.47	28.75	30.41	29.88	**42.17**	19.00	2.65	19.34	7.39	9.79	20.08	**0.91**	30.3	27	**—9.9**	10
Agosto	30.98	29.11	30.80	**30.30**	38.97	19.81	4.34	21.39	8.45	11.39	22.12	1.97	28.6	16	—3.0	23
Setiembre..	30.02	27.85	30.12	29.33	38.81	19.92	9.12	20.32	12.34	13.92	21.10	6.43	32.5	3	—1.8	21
Octubre....	29.79	26.96	28.97	28.57	31.35	18.31	13.64	24.19	14.93	17.59	24.91	9.01	34.8	17	1.7	5
Noviembre.	27.04	24.54	25.59	25.72	36.28	16.23	16.94	25.76	18.05	20.25	27.41	12.91	34.5	3,15,19	8.0	17
Diciembre..	25.50	23.69	24.63	24.61	32.02	**14.02**	20.56	30.40	21.28	**24.08**	**32.45**	14.64	**39.0**	13	7.3	1
Año	28.38	26.51	28.01	27.63	42.17	14.02	11.76	23.61	14.76	16.71	24.67	9.11	39.0	13,XII	—9.9	10,VII

RESUMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1886

Tab. XIII, 2.

MESES	TERMOMÉTRO HÚMEDO	HUMEDAD ABSOLUTA (mm.)				HUMEDAD RELATIVA				EVAPORACION (mm.) LIBRE				EVAPORACION (mm.) Á LA SOMBRA			
	Cent.	7 a.	2 p.	9 p.	PROM.	7 a.	2p.	9p.	Prom.	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
Enero.	**20.0**°	14.69	15.56	15.57	**15.27**	83.5	54.5	77.8	71.9	7.1	75.5	42.2	124.8	7.1	25.2	27.0	59.3
Febre..	19.0	14.07	14.80	14.67	14.51	87.3	55.6	77.2	73.4	5.4	66.7	44.5	116.6	4.9	20.8	23.7	49.4
Marzo.	17.1	12.32	13.14	13.13	12.87	91.6	53.9	81.2	**75.6**	4.8	73.6	48.7	127.1	4.0	20.6	23.9	48.5
Abril..	12.5	8.42	9.76	9.66	9.28	86.4	49.5	77.7	71.2	5.1	54.0	29.4	88.5	5.3	19.0	16.7	*41.0*
Mayo..	9.3	6.41	7.85	7.25	7.17	90.5	39.9	72.3	67.6	5.0	76.2	42.1	123.3	4.6	26.2	26.3	57.1
Junio.	5.9	5.18	5.76	5.86	5.60	87.7	44.8	77.9	70.1	5.9	52.1	30.3	*88.3*	5.5	20.6	20.7	46.8
Julio..	*5.8*	4.62	5.23	5.19	5.01	81.1	29.5	64.9	58.5	11.9	76.2	55.8	143.9	10.2	36.1	35.9	82.2
Agosto	6.3	4.18	4.42	4.66	*4.42*	68.5	22.9	55.3	*48.9*	19.2	121.7	77.8	218.7	15.3	58.9	51.3	**125.5**
Setre..	9.9	6.51	7.43	7.01	6.99	75.1	45.5	67.0	62.6	23.4	108.7	67.5	199.6	17.7	47.5	40.7	105.9
Octre..	13.3	8.68	9.50	9.05	9.08	74.7	43.3	71.7	63.2	9.5	123.2	70.2	202.9	8.1	42.9	39.1	90.1
Novre..	15.7	10.53	10.72	10.90	10.72	73.6	46.1	71.4	63.7	10.3	120.7	57.3	188.3	8.7	38.2	31.1	78.0
Dicre..	17.8	12.03	11.09	11.67	11.60	66.4	37.4	62.8	55.5	13.1	167.8	92.4	**273.3**	11.9	50.3	47.5	109.7
Año...	12.72	8.97	9.61	9.55	9.38	80.5	43.6	71.4	65.2	120.7	1116.4	658.2	1895.3	103.3	406.3	383.9	893.5

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1886

Tab. XIII, 3

MESES	TEMPERATURAS DEL SUELO													
	SUPERFICIE INTERNA										A 7.5 CENT. DE PROFUND.			
	7 a.	2 p.	9 p.	PROM.	MEDIAS		ABSOLUTAS				7 a.	2 p.	9 p.	PROM.
					Máx.	Mín.	Max.	Fecha	Mín.	Fecha				
Enero	21.0	30.9	22.5	24.8	35.9	18.9	51.5	1	14.4	20	21.44	24.90	23.53	23.29
Febrero	19.3	31.0	21.4	23.9	35.0	17.6	46.7	19	11.3	14	20.10	23.77	22.47	22.11
Marzo	17.2	25.4	19.3	20.6	31.5	16.0	46.8	11, 12	11.3	20	18.51	22.08	20.62	20.40
Abril	12.5	20.2	14.9	15.9	23.8	11.6	33.0	18	4.8	12	14.35	17.48	16.47	16.10
Mayo	7.9	20.8	11.6	13.4	24.4	6.6	31.4	27	1.0	17	10.70	15.28	13.57	13.18
Junio	4.7	14.6	7.1	*8.8*	16.4	3.7	22.6	25	—2.5	22	6.97	10.61	9.00	*8.86*
Julio	3.7	19.1	7.2	10.0	22.2	*2.9*	30.0	27	—5.5	10	7.10	12.70	10.41	10.07
Agosto	5.4	24.0	8.9	12.8	29.7	3.0	40.6	29	—0.0	22	9.14	16.72	13.16	13.01
Setiembre	10.2	25.7	12.8	16.2	30.4	8.7	47.0	13	0.8	21	13.09	19.55	16.27	16.30
Octubre	14.4	30.6	15.5	20.2	34.4	11.4	46.0	31	5.4	5	15.53	23.03	19.21	19.26
Noviembre	18.4	31.3	18.9	22.9	42.0	15.3	59.4	20	10.2	11	18.85	25.95	21.58	22.13
Diciembre	23.9	38.0	22.6	**28.2**	**49.5**	17.7	**63.4**	26	12.2	1	22.57	30.55	25.88	**26.33**
Año	13.2	25.9	15.2	18.14	31.3	11.1	63.4	26, XII	—5.5	10, VII	14.85	20.22	17.68	17.58

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1886

Tab. XIII, 4.

MESES	TEMPERATURAS DEL SUELO													
	A 15 CENT. DE PROFUND.				A 36 CENT. DE PROFUND.				A 66 CENT. DE PROFUND.				Á 96 CENT. de PROFUNDID.	Á 126 CENT. de PROFUNDID.
	7 a.	2 p.	9 p.	PROM.	7 a.	2 p.	9 p.	PROM.	7 a.	2 p.	9 p.	PROM.	2 p.	2 p.
Enero	22.29	23.06	23.68	23.01	23.27	23.08	23.13	23.16	22.30	22.32	22.35	22.32	21.58	20.72
Febrero	21.15	21.72	22.55	21.81	22.19	22.02	22.10	22.10	21.63	21.72	21.73	21.69	21.38	20.91
Marzo	19.74	20.35	20.89	20.33	21.22	21.00	21.02	21.08	21.12	21.10	21.06	21.09	21.07	20.83
Abril	15.71	16.25	16.80	16.25	17.56	17.39	17.38	17.44	18.01	18.02	17.99	18.01	18.55	18.88
Mayo	12.44	13.22	13.99	13.22	14.24	14.03	14.03	14.10	14.89	14.86	14.86	14.87	15.69	16.42
Junio	8.45	9.17	9.62	*9.08*	10.41	10.26	10.25	10.32	11.58	11.56	11.49	11.54	12.92	13.99
Julio	8.83	9.89	10.75	9.82	10.38	10.17	10.24	*10.26*	10.77	10.78	10.79	*10.78*	*11.58*	*12.33*
Agosto	11.22	12.91	13.75	12.63	12.84	12.57	12.72	12.71	12.70	12.74	12.75	12.73	12.97	12.85
Setiembre	14.91	16.60	16.88	16.13	16.51	16.22	16.35	16.36	16.16	16.17	16.17	16.17	15.94	15.66
Octubre	17.22	19.31	19.74	18.76	18.76	18.47	18.75	18.66	17.96	18.01	18.04	18.00	17.41	16.92
Noviembre	20.31	22.74	22.32	21.79	21.94	21.60	21.87	21.80	21.01	21.00	20.99	21.00	20.22	19.54
Diciembre	23.88	26.83	26.36	**25.69**	24.95	24.65	24.95	**24.85**	23.50	23.52	23.54	**23.52**	**22.31**	**21.35**
Año	16.35	17.67	18.11	17.38	17.86	17.62	17.73	17.74	17.63	17.65	17.65	17.64	17.63	17.53

RESUMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1886

Tab. XIII, 5.

MESES	NEBULOSIDAD EN LA ESCALA DE 10				PRECIPITACION				NÚMERO DE LOS DIAS CON						DIAS		LLUVIA en el momento de la observacion
	7 a.	2p.	9p.	PROM.	MM.	%	MÁX. (mm.)	FECHA	LLUVIA	NIEVE	GRANIZO	TRUENOS y relámpagos	RELAMPA-GOS	NEBLINA	CLAROS	NUBLADOS	
Enero	3.9	4.1	3.2	3.7	122.2	22.8	47.5	13	12	—	—	10	—	—	10	3	6
Febrero	5.1	5.5	5.2	5.3	31.6	5.9	12.0	25	7	—	—	6	1	—	5	6	8
Marzo	4.3	3.8	4.0	4.0	85.2	15.9	32.9	14	10	—	—	4	—	—	11	5	5
Abril	6.0	5.4	4.7	**5.4**	5.5	1.0	2.5	21	5	—	—	1	—	—	3	7	7
Mayo	3.3	2.5	3.4	3.1	65.9	12.3	50.2	30	5	—	1	4	—	—	14	3	1
Junio	5.3	4.6	4.7	4.9	0.3	0.0	0.3	17	1	—	—	—	—	—	9	7	1
Julio	3.8	3.0	2.0	2.9	0	—	—	—	—	—	—	—	—	—	12	1	0
Agosto	2.2	1.6	1.1	1.6	0	—	—	—	—	—	—	—	—	—	21	0	0
Setiembre ...	5.1	4.5	5.0	4.9	40.3	7.5	31.0	19	4	1	—	3	—	—	11	9	8
Octubre	3.4	3.1	2.9	3.1	45.8	8.6	22.6	3	9	—	2	5	1	1	12	2	4
Noviembre ..	4.7	4.7	4.7	4.7	101.0	18.8	47.8	22	9	—	2	6	—	—	9	7	5
Diciembre ...	3.4	3.4	1.6	2.8	38.5	7.2	10.7	27	8	—	1	5	—	—	13	1	2
Año	4.2	3.9	3.5	3.9	536.3	100	50.2	30, v	70	1	6	44	2	1	130	51	47

RESUMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1885

DISTRIBUCION DE LOS VIENTOS

Tab. XIII, 6.

MESES	7 a. m.										2 p. m.									
	N	NE	E	SE	S	SW	W	NW	Calma	Suma	N	NE	E	SE	S	SW	W	NW	Calma	Suma
Enero	—	3	2	—	5	—	1	—	20	31	2	13	4	3	3	1	1	—	4	31
Febrero	1	3	1	1	5	1	—	1	15	28	6	7	6	4	3	—	1	—	1	28
Marzo.......	—	1	1	1	3	—	—	—	25	31	2	12	6	7	1	1	—	—	2	31
Abril	—	2	—	3	5	—	—	—	20	30	2	12	3	8	2	—	—	—	3	30
Mayo.......	—	1	—	—	2	—	1	—	27	31	4	9	4	5	7	—	—	—	2	31
Junio.......	1	1	—	—	5	2	—	—	21	30	1	7	3	5	9	1	—	—	4	30
Julio	—	—	—	1	4	—	—	—	26	31	1	16	2	3	7	—	—	1	1	31
Agosto......	—	2	—	—	2	2	1	—	24	31	—	15	3	3	5	—	3	1	1	31
Setiembre...	1	2	1	—	10	2	—	—	14	30	2	7	4	6	8	1	—	1	1	30
Octubre	1	7	—	2	5	1	—	—	15	30	1	17	6	1	5	—	—	—	1	31
Noviembre...	1	4	1	2	5	2	—	—	15	30	1	16	1	4	5	—	—	—	3	30
Diciembre...	1	7	—	3	4	—	—	1	15	31	3	11	3	4	4	—	—	2	4	31
Año	6	33	6	13	55	10	3	2	237	365	25	142	45	53	59	4	5	5	27	365

RESUMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1886

DISTRIBUCION DE LOS VIENTOS

Tab. XIII, 7.

MESES	9 p.m.										DIA									
	N	NE	E	SE	S	SW	W	NW	Calma	Suma	N	NE	E	SE	S	SW	W	NW	Calma	Suma
Enero	—	—	—	1	—	—	1	—	29	31	2	16	6	4	8	1	3	—	53	93
Febrero	—	1	1	1	—	—	—	—	25	28	7	11	8	6	8	1	1	1	41	84
Marzo	1	1	—	1	5	—	—	—	23	31	3	14	7	9	9	1	—	—	50	93
Abril	—	2	—	2	3	—	—	—	23	30	2	16	3	13	10	—	—	—	56	90
Mayo	1	5	—	—	3	1	—	—	21	31	5	15	4	5	12	1	1	—	50	93
Junio	—	4	—	—	6	2	—	—	18	30	2	12	3	5	20	5	—	—	43	90
Julio	—	3	—	—	5	1	—	—	22	31	1	19	2	4	16	1	—	1	49	93
Agosto	—	1	—	—	1	1	—	—	28	31	—	18	3	3	8	3	4	1	53	93
Setiembre	1	2	—	1	10	1	—	—	15	30	4	11	5	7	28	4	—	1	30	90
Octubre	—	1	1	—	2	—	—	—	27	31	2	25	7	3	12	1	—	—	43	93
Noviembre	1	4	1	1	3	—	—	—	20	30	3	24	3	7	13	2	—	—	38	90
Diciembre	2	1	—	—	3	—	—	—	25	31	6	19	3	7	11	—	—	3	44	93
Año	6	25	3	7	41	6	1	—	276	365	37	200	54	73	155	20	9	7	550	1095

CONTENIDO DE LA PRESENTE ENTREGA

PARTE CIENTÍFICA

BOLETIN

DE LA

ACADEMIA NACIONAL DE CIENCIAS

EN

CÓRDOBA

(República Argentina)

Enero de 1888. — Tomo XI. — Entrega 2ª

La Correspondencia y Cange deberán ser dirigidos así:

Academia Nacional de Ciencias

CÓRDOBA

(República Argentina)

BUENOS AIRES

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60 — calle alsina — 60

1888



ACADEMIA NACIONAL DE CIENCIAS

DE LA

REPÚBLICA ARGENTINA (EN CÓRDOBA)

PROTECTOR

S. E. el Presidente de la República, Dr. D. MIGUEL JUAREZ CELMAN

PRESIDENTE HONORARIO

S. E. el Ministro de Justicia, Culto é Instruccion Pública, Dr. D. FILEMON POSSE

COMISION DIRECTIVA Y REDACTORA

PRESIDENTE

Dr. D. Oscar Doering

DIRECTORES

Dr. D. Luis Brackebusch.
Dr. D. Adolfo Doering.
Dr. D. Arturo de Seelstrang.
Dr. D. Federico Kurtz.

SECRETARIOS INTERINOS

Interno y de actas: **D. F. Alvarez Sarmiento.**
De correspondencia extrangera: **Dr. D. Federico Kurtz.**

AGENTES DE LA ACADEMIA NACIONAL DE CIENCIAS

Agente general: Librería de G. Deuerlich en Göttingen (Alemania).
Agentes: Buenos Aires, D. Ernesto Nolte, calle Cangallo.
Paris, Mr. H. Le Soudier, Libraire, Boulevard St. Germain 174 et 176.
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FUNGI FUEGIANI

AUCTORE

CAROLO SPEGAZZINI

PRAEMONITUM.

Anni quinque, post regressum meum e peregrinatione per ultimos Americae australis fines, elapsi sunt et nunc tandem fungos observatos v. collectos publico jure facio; tempestatibus pluribus obstantibus, opus antea absolvere non potui.

Fuegia montuosa, sylvis densissimis pratisque uliginosis circumtecta, aëre humidissimo hiemeque modice algido donata, flora mycologica ditissima, typo fere gerontogeo, gaudet.

Agaricinei abundat, Cortinarii praecipue, Hygrophori, Russulae ac Lactarii tamen deficiunt; polyporei, Boletis exceptis, copiosissimi etiam, sed paucas exhibent species; familiae caeterae plus minusve vulgatae; inter omnes, quam maxime insignes Cyttariae, quae una cum polyporeis alimentum praecipuum incolis praebent.

Species repertas in 1200 circiter puto sed quum in Slogget bay (*Amacowáia* incolarum) naufragium passus sim, hymenomycetes arrepti, hyphomycetes distenti a fluctibus fuerunt et nunc 500 species tantum mihi pubblicare possibile est.

Basidiomycetum diagnoses, e descriptionibus in vivo peractis excerptae, saepe tandem, characteribus sporologicis deficientibus, determinatione dubiosae; ascomycetum specimina perplurima, notabile etiam, saepissime sterilia inventa sunt.

Opellum hoc, regionem Mycologis fere adhuc ignotam illustrans, etiamsi summopere mancum non inutile et in spe sum Vos consueta humanitate accipietis.

Carolus Spegazzini.

La Plata, 1 Aug. 1887.

HYMENOMYCETEAE Fr.

AGARICINEAE Fr.

1. Agaricus (*armillaria*) melleus Fl. Dan. — Fr., Hym. eurp. p. 44, n. 101.

Hab. Ad basin truncorum subputrescentium in pratis sylvisque in *Staten island*, Mart. 1882.

Obs. Gregarius, rarissime tamen subconfluens, sordide melleus; pileus primo hemisphaericus, dein gradatim explanatus (4-6″ diam.), postremo non rarius concavus, laevis v. praecipue in senectute ad marginem plus minusve intense striatus, sordide ceraceo-melleus, saepeque centrum versus subfuligineus, udus subhygrophanus, siccus subsericeo-micans, in juventute non rarius minute squamuloso-punctulatus, umbone nullo, epidermide tenuissima vix perspicua; lamellae antice subattenuatae, rotundatae, postice latae (1″ lat.), sinuatae, dente majusculo decurrentes, laeves, acie integrae, subdimacriae albo-ceraceae cum carne pilei continuae; stipes cylindraceus (6-7″ long. × 0,5-1″ crass.) vix v.

non ad tertium superum incrassatulus, superne laevis, medio saepe in juventute minute velutino-furfurellus, inferne laevis non v. vix floccoso-radicatus, colore ludens ex albo v. roseo ad melleum vergens, farctus; anulus parte tertia supera stipitis adnatus, descendens, membranaceo-subfurfurellus, facillime evanescens.

Caro pilei ad marginem nulla, dein gradatim incrassatula cum illa spititis continua, alba, in stipite fibrosa.

Sporae e globoso ovoideae, grosse 1-guttulatae, basi acute angulosae (6,5-7 × 4,5-5 μ), hyalinae.

2. Agaricus (*tricholoma*) auratus Fr.—Hym. eurp. p. 50, n. 122.

Hab. Ad dunas marittimas in *Penguin rookery* in *Staten island*, Mart. 1882.

Obs. Specimina senescentia sed nullo modo ab europeis recedentia.

3. Agaricus (*tricholoma*) iaganicus Speg. (n. sp.)

Diag. Solitarius v. saepius gregarius subfasciculatusve; pileus hemisphaericus, regularis v. vix hinc inde depressulus (2,5-3″ diam.) intense pulchreque castaneus, laevissimus, glaberrimus, subnitens, margine integer prominulus pallescens; lamellae confertiusculae, latiusculae, antice acutae, postice truncato-adnatae, fulvae v. pallide subferrugineae, polymacriae, acie integerrimae; stipes farctus, teres, breviusculus (5″ long. × 8-10‴ crass.) laevissimus v. vix inferne fibrillosus, pileo concolor, sub hymenio pallidior ac incrassatulus, ad quintum superum anulato-squarrulosus, basi obscurior non v. vix turgescens. Caro succosa, hygrophana, subcastaneo-pellucida. Velum parvulum vix in juventute integrum, castaneum, fibrilloso-submembranaceum.

Hab. Vulgatus in pratis humosis ac in areolis ignariis prope *Ushuvaia*, Maj. 1882.

Obs. Sporae obovatae, superne obtuse rotundatae, inferne acutatae (10 μ × 5 μ), hyalinae, laeves.

4. AGARICUS (*tricholoma*) MAGELLANICUS Speg.—Fung. pat. n. 2.

Hab. In herbosis in peninsula *Ushuvaia* Maj. 1882.

5 AGARICUS (*tricholoma*) PSEUDORUSSULA Speg. (n. sp.)

Diag. Solitarius; pileus applanatus, centro vix depressulus, glaberrimus, laevissimus, quandoque subcinerascens quandoque rubescens, saepius tamen violascens, hinc indi maculato-pallescens, latiusculus (3,5-4″ diam.), crassiuscule carnosus, rigido-fragilis, cute facile secedente tectus, margine integer, subincurvulus; lamellae albae v. subceraceo-pallescentes, crassiusculae, fragiles, monomacriae antice acutae, postice acutato-adnatae, centro latiores (1,5″ long. × 0,5″ lat.), carne pilei concretae, confertiusculae, acie integerrimae, obtusiusculae; stipes tereti-obclavatus, basi truncato-rotundatus, fragilis, glaberrimus, laevissimus, albus quandoque centrum versus plus minusve roseus v. violascens, farctus.

Caro pilei rigidula alba, illa stipitis flocculoso-spongiosa, candidissima.

Hab. In pratis nec non in sylvis in *Staten Island* et in *Voces bay*, Mart. et. Maj. 1882.

Obs. Stipes basi vix radicatus; odor nullus v. vix farinae recentis; sapor parum manifestus subdulcis.

6. AGARICUS (*clitocybe*) DEALBATUS Sow.—Fr., Hym. eurp. p. 88, n. 260.

Hab. In pratis humosis inter *Port Cook* et *Port Vancouver* in *Staten island*, Mart. 1882.

Obs. Specimina a typo vix recedentia stipite nonnihil breviore ac crassiore.

7. Agaricus (*clitocybe?*) fallaciosus Speg. (n. sp.)

Diag. Solitarius v. gregarius; pileus primo hemisphaericus dein gradatim expansus applanatus, magnitudine ludens (1-3″ diam.) postremo tandem concavo-revolutus, margine semper rectus, exumbonatus, glaberrimus, laevissimus, pulchre fulvo-carneus v. melleo-fulvus; lamellae subdistantes, carnosulae, rigidulae, albo-roseae, (rarius pileo concolores!), margine integerrimae, trimacriae, antice attenuato-acutatae, postice rotundato-adnatae, latiores; stipes longus rectus flexilis fistulosus fibrosulus glaberrimus laevissimus superne gradatim attenuatus, inferne incrassatulus, basi subtruncato-rotundatus, (5-8″ long. × 3-4‴ crass.), parce albo-pruinuloso-radicatus, fusco-rubescens v. fulvo-ferrugineus.

Hab. Ad muscos vulgatissimus in sylvis pratisque per tota *Staten island,* Mart. 1882.

Obs. Caro pilei compactiuscula, tenuis, fulvo-mellea, illa stipitis fibrosula. Species primo intuitu *Ag. laccatum* Scop. in mente revocans. Sporae ovoideae (10 × 6 μ), inferne ac subinaequilateraliter acutatae, laeves, hyalinae.

Specimen pileo atrophice conico, umbonato, stipite pro ratione crasso longissimoque, colore rubescenti-carneum etiam in herbosis scopulosis *Basket island* inveni, Maj. 1882.

8. Agaricus (*clitocybe*) tucala Speg. (n. sp.)

Diag. Solitarius, parvulus; pileus infundibuliformis (2″ diam.), castaneo-fuscus, glaberrimus, laevissimus, margine rectus, acutus, integer v. vix repandulus; lamellae densiusculae strictae lineares polymacriae, acie integerrimae, utrinque attenuato-acutissimae, decurrentes, primo albescentes dein sordide carneo-fuscescentes; stipes brevis (5-10‴ long. × 3-4‴ crass.), tereti-obco-

nicus, postice attenuatus, basi rotundatus parcissimeque radicatus, farctus carneo-fuscus v. melleo-fulvus. Caro in pileo tenuis, in stipite fibrosulo-compactiuscula, fusco-carnea, hygrophana.

Hab. In campis praecipue ad coespites *azorellarum* (*tucála* ab incolis vocatos) prope *Ushuvaia*, Maj. 1882.

9. AGARICUS (*collybia*) USHUVAIENSIS Speg. (n. sp.)

Diag. Pileus subhemisphaerico-explanatus (4″ diam.), late grosseque umbonatus, laevissimus, glaberrimus vix udus viscosus, castaneo-fuscus v. testaceo-fuscescens, margine integer v. vix repandulus; lamelle fusco-albicantes, latae (1″ lat.) polymacriae, confertiusculae, longe sinuato-adnatae, crassiuscule membranaceae, acie integerrimae, pallidiores; stipes pro ratione curtus crassusque (5-5,5″ long. × 1″ diam. sup. = 1,5-2″ diam. inf.), vicies tortus, glaberrimus, vix minutissime torto-fibrillosus, pileo concolor, superne pallidior, farctus, mycelio parco albicante ornato. Caro flaccidula, albo-fuscescens, illa stipitis fibrosula tenacella. Velum nullum.

Hab. In sylvis fagineis prope *Ushuvaia*, *Beagle Channel*, Maj. 1882.

Obs. Sub iove pluvio fungus totus subhygrophanus evadit. In senectute flaccescens ac vere fœtidus. Sporae elliptico-obovatae, superne obtusae, inferne acutatae (10 × 5 μ), laeves, hyalinae.

10. AGARICUS (*mycena*) CILOTUS Speg. (n. sp.)

Diag. Parvulus, fulvus, puberulus, sparsus; pileus primo subhemisphaericus (2-6‴ diam.), margine subincurvulus, densiuscule pilosus, dein subcampanulato-expansus, subumbonatulus, dense puberulus, margine acutiusculus, rectus, integer, fulvo-melleus, centro intensius coloratus; lamellae paucae distantes, postice adnato-

truncatae, non decurrentes nec sinuatae, pro ratione crassiusculae, acie integrae, albae v. perdilute fulvescentes; stipes centralis, sub pileo abrupte incurvatus, teres, exilis (5-10‴ long. × 0,5-1‴ crass.), colore pilei v. vix obscurior, in juventute pilosus, dein puberulus, basi adnatus, mycelio radiatim dilatatulo, albescente, non puberulo, compactiusculo donatus.

Hab. Ad caules v. ramulos *Senecionis* cujusdam emortui in marittimis prope *Chilota bay*, Jun. 1882.

11. Agaricus (*mycena*) capillaris Schum.— Speg., Fung. pat. n. 7.

Hab. Ad ramulos nec non folia dejecta faginea in sylvis prope *Port S. John* in *Staten island*, Mart. 1882.

12. Agaricus (*mycena*) exquisitus Hook. — Speg., Fung. pat. n. 6.

Hab. Ad ramulos dejectos putrescentes *Chiliotrichi amelloidis* et *Pernettiae mucronatae* in sylvis *Gabel island*, Jun. 1882.

13. Agaricus (*mycena?*) funebris Speg. (n. sp.)

Diag. Pileus hygrophanus, primo conico-campanulatus, plus minusve acute umbonatus, dein campanulato-expansus (2,5″ diam.-2,5″ alt.), valide umbonatus, laevissimus, glaberrimus, margine in juventute incurvulus dein rectus, repandulus, in senectute saepe fissus, non v. rarius minutissime substriatus, tenuiusculus, sordide fusco-fuligineus; lamellae polymacriae, confertiusculae, latiusculae, membranaceae, antice abruptiuscule acutato-obtusatae, medio latiores, postice attenuato-acutatae, adscendentes, non adnatae, acie integerrimae, primo albescentes dein sordide fuscae; stipes fistulosus, rectus teres (5,5-6″ long. × 0,5″ crass.) albus primo fuscescenti-pruinulosus, dein glabratus, hygrophanus,

tortus, basi nonnihil incrassatus in juventute furfuraceo-gossypinus, vix radicatus.

Hab. In truncis cariosis putrescentibus in sylvis subvirgineis prope *Port Cook*, *Staten island*, Mart. 1882.

Obs. Caro pilei tenuis fusca hygrophana fragilis, illa stipitis fibrosula tenacella.

14. Agaricus (*mycena*) hiemalis Osb.— Fr., Hym. eurp. p. 153.

Hab. Ad cortices annosas et muscosas in *Slogget bay*, Jun. 1882.

15. Agaricus (*mycena*?) insularis Speg. (n. sp.)

Diag. Calodon; solitarius v. gregarius, rarissime subcoespitosus; pileus glaberrimus, primo digitali-campanulatus, apice obtusiusculus saepeque subumbonatulus, laevissimus, hygrophanus, dein gradatim campanulatus (2″ diam.), postremo subapplanato-expansus, margine integer, curvulus, in juventute stipite adpressus, epidermide non v. vix secedens, uda subviscosa; lamellae trimacriae utrinque attenuatae, majores stipite adnatae non v. vix denticulo decurrentes strictiusculae griseae acie integrae crassiusculae intensius coloratae, carne pilei connatae; stipes teres vix deorsum nonnihil incrassatus (3″ long. × 1″ crass.), laevissimus, fistulosus, hygrophanus, rectus v. rarius subtortus, flexilis, inferne pruinulosus v. subhirsutulus, vix radicato-adnatus. Caro pilei compactiuscula, uda subgelatinosa, lamellis stipiteque adnata.

Hab. Ad truncos dejectos putrescentes in pratis sylvisque *Staten island*, Mart. 1882.

Obs. Color pilei ad umbonem fere ligni putrescentis, peripherice ac supra lamellas intensior, cœterum cinerascens. In senectute fungus saepe totus aquose diffluit.

Species haec etiam in *Iandagaia*, *Burnt island* et *Ushuvaia* Fuegiae inventa.

16. Agaricus (*mycena*) pseudomuralis Speg. (n. sp.)
Diag. Solitarius; pileus hemisphaericus (6-8‴ diam.), obtuse rotundatus nunquam umbonatus, glaberrimus, laevissimus, margine rectus, integer, rectus, rufescenti-ochraceus, centro obscurior, striis obscuris longis pulchre ornatus; lamellae dimacriae, distantes, subtrigonae, antice angulato-rotundatae, postice latiuscule adnato-truncatae, acie integrae, pileo concolores v. vix pallidiores; stipes teres, rectus v. flexuosus, tenuis (1-2‴ diam.), pileo concolor v. rufescenti-ferrugineus, glaberrimus, laevissimus, fistulosus, basi non v. vix incrassatulus parceque albo-pruinulosus, subtomentoso-radicatus.
Hab. Ad muscos et ramenta putrida in sylvis prope *Port Cook* in *Staten island*, Mart. 1882.
Obs. Species *Ag. murali* Sw. primo intuitu simillima, plurimis notis tamen distinctissima.

17. Agaricus (*Omphalia*) novissimus Speg. (n. sp.)
Diag. Solitarius, albus, hygrophanus, parvulus; pileus explanato-expansus (5-8‴ diam.), margine subincurvus, centro non v. vix depressulus ac per aetatem fuscescens, glaberrimus, striis radiatis vix perspicuis ornatus; lamellae membranaceae e hyalino albae latiusculae, antice attenuato-obtusatae, deorsum adnatae ac modice acutato-decurrentes, dimacriae, acie integerrimae; stipes rectus, rigidulus, albus v. hyalino-albus, glaberrimus, laevissimus (2-3″ long. × 0,5-1‴ diam.), deorsum parcissime incrassatus, basique laxe strigoseque sericeo-myceliferus, innatus, fistulosus.
Hab. Ad lichenes nec non ramenta putrescentia non rarus in *Staten island*, Mart. 1882.

Obs. Species pulchella, delicatissima, pellucida, *Ag. capillari* Schum. affinis sed satis distincta.

18. AGARICUS (*omphalia*) FIBULA Bull.— Fr., Hym. eurp. p. 164, n. 567.
Hab. Ad truncos annosos muscosos in sylvis sub *Monte Sarmiento*, Maj. 1882.

19. AGARICUS (*pleurotus*) GOSSYPINULUS Speg.—Fung. pat. n. 11.
Hab. Ad truncos cariosos vetustos in *Gabel island, Beagle Channel*, Maj. 1882.

20. AGARICUS (*pleurotus*) AULAXINUS Mntgn.— Gay, Fl. Chil. vol. VII, p. 337.
Hab. Vulgatissimus ad truncos cariosos v. putrescentes *Berberidis ilicifoliae* per tota *Fuegia*, Maj. et Jun. 82.
Obs. Forma fuegiana a typo recedit pileo et stipite sordide albis; lamellae vere reticulato-connexae, *Favolum pusillum* mentientes, membranaceae, albae; sporae globoso-ovoideae, inferne acutato-subapiculatae (6 $\times$ 5 μ), granuloso-farctae, hyalinae.

21. AGARICUS (*pleurotus*) APPLICATUS Batsch.— Fr., Hym. eurp. p. 180, n. 635.
Hab. Ad ramos denudatos putrescentes *Fagi betuloidis* in *Staten island*, Mart. 1882.

22. AGARICUS (*pleurotus*) MINUSCULUS Speg. (n. sp.)
Diag. Pusillus, solitarius; pileus dimidiatus(2-4''' diam.) antice obtuse rotundatus, postice subtruncato-cordiformis ac abrupte in stipite productus, laevissimus, glaberrimus ex albo hyalinus centro saepe roseus; lamellae 2-macriae, strictae, crassiusculae, simplices, subdistantes, utrinque acutatae, non decurrentes ex albo roseolae; stipes brevis (1-2''' long. $\times$ 0,5''' crass.) teres, glaber, laevis.

Hab. Ad ramos emortuos *Mayteni magellanici* in sylvis *Gabel Island,* Maj. 1882.

Obs. Species primo intuitu facillime pro *Ag. dictyorhizo* Fr. sumenda. Sporae obovatae, antice obtuse rotundatae, postice acutatae (6-7 × 2 μ), laeves, hyalinae.

23. Agaricus (*pholiota*) subflammans Speg.— Fung. pat. n. 14.

Hab. Ad truncos cariosos vetustos muscosos *Berberidis ilicifoliae* vulgatissimus per *Fuegia* tota, Maj. et Jun. 1882.

24. Agaricus (*pholiota*) pumilus Fr.— Hym. eurp. p. 226, n. 228.

Hab. Vulgatus inter muscos in sylvis prope *Port Cook* in *Staten island,* Mart. 1882.

Obs. Species ut videtur summopere variabilis, colore, statura nec non crassitudine partium.

25. Agaricus (*Inocybe*) fuegianus Speg. (n. sp.)

Diag. Solitarius, majusculus; pileus primo hemisphaericus dein plano-expansus (6″ diam.), non umbonatus, saepe centro non v. vix depressus ac sublaevis, caeterum densiuscule villosulo-papillosus, castaneus v. fusco-fuligineus, margine integer repandus undulatusve; lamellae latiusculae (1″ lat.), membranaceae, subdistantes, antice attenuato-acutatae, postice sinuato-adnatae, griseo-fuscescentes, polymacriae, acie integerrimae; stipes curtus ac crassus (5″ long. × 1″ crass. sup. — 2″ crass. inf.), laevis v. longitudinaliter fibrillosus, rectus, ex albo fusco-fuligineus, non v. vix cavus, basi validiuscule incrassatus lateque myceliferus. Caro alba, compactiuscula, vix in stipite subtenax. Velum nullum.

Hab. Rarissime in sylvis fagineis prope *Ushuvaia, Beagle Channel,* Maj. 1882.

Obs. Species notis nonnullis *Psilocybibus* accedens, *Ag. caesariato* Fr. summopere affinis sed toto coelo abhorrens. Sporae ellipticae v. subovoideae, utrinque obtusiusculae (10-12 × 5-6 μ) laeves, ferrugineae.

26. Agaricus (*hebeloma?*) naufragus Speg. (n. sp.)

Diag. Pileus e membranaceo-carnosus, grosse obtuseque umbonatus, primo subcampanulatus, dein expansus (3-5″ diam.), glaber laevis viscidus v. subvernicosus, margine substriatus, repandulus saepeque fissus v. sublobato-contortus, sordide terreus; lamellae crassiusculae, subdistantes, antice obtusiusculae, postice sinuatae ac plus minusve adnatae, pileo concolores v. pallidiores; stipes curtus, crassus fere obclavatus (3-4″ long. × 1-1,5″ crass.), late fistulosus, carnoso-tenacellus, teres sed saepe e latere compressus non v. vix subtortus, albescens, apice minutissime evanescenti-pruinulosus, basi rotundatus non v. vix radicatus.

Hab. Inter muscos in sylvis ac in pratis sub nive prope *Slogget bay*, Jun. 1882.

Obs. Species, statura excepta, *Ag. magnimamma* Fr. summopere affinis sed certe ab ea distincta.

27. Agaricus (*flammula*) statuum Speg. (n. sp.)

Diag. Sapineus v. peregrinus; pileus primo hemisphaerico-expansus, obtusus, exumbonatus, dein gradatim expansus, postremo infundibuliformis (6-7″ diam.), ferrugineo-fuscus v. badius, centro leviusculus v. papilluloso-araneosus v. subvelutinus, caeterum grosse denseque squamosus, squamis fimbriato-laceris, margine udus rectus, siccus autem subfissus ac subinvolutus; lamellae utrinque attenuato-acutatae, submonomacriae, longiusculae, postice attenuato-decurrentes, primo albae integrae dein croceo-cinnamomeae, lacero-fissae v. undulatae, discretae; stipes crassiusculus, mediocris

(5-6″ long. × 1″ crass. sup. = 1,5″ crass. inf.), pileo concolor, laevis v. longitudinaliter (per aetatem?) rugulosus, densiuscule pubescenti-v. velutino-cinnamomeus, abrupte truncato-adnatus. Caro pilei stipitisque fulvo-aurantia, mox putrescens, foetidula. Velum nullum.

Hab. Ad truncos fagineos in sylvis prope *Hoppner harbour* in *Staten island*, Mart. 1882.

Obs. Species perpulchra, distinctissima, rara. Sporae ovato-ellipticae, inferne non v. vix inaequilateraliter acutato-apiculatae (9-10 × 4-5 μ), pulchre ferrugineo-aurantiae, laeves.

28. Agaricus (*naucoria?*) puellula Speg. (n. sp.)

Diag. Solitarius v. hinc inde 2-3-gregarius, totus ex albo ceraceo-subvirescens; pileus primo campanulatus v. subdigitaliformis obtusissime subumbonatus, margine incurvulus, centro glaber margine subaraneosus, dein gradatim convexo-explanatus (3-4″ diam.) plus minusve umbonatulus, pallide sordideque ceraceo-melleus, centro vix intensius coloratus, udus hygrophanus viscidulus, siccus laevissimus extrius glabratus v. subaraneosus; lamellae tenues, subdimacriae, sinuato-adnatae, antice strictiores, pilei carne concretae, acie integrae, primo albae dein sordide e fusco virescentes; stipes teres, tenuis (3-4″ long. × 0,5″ crass.), rectus, fibrosulus, fistulosus, subrufescenti-ceraceus, albo-pruinulosus, saepe basi hispidulus ac subtomentosulo-myceliferus, parce radicatus.

Caro pilei tenuiuscula per totum pileum expansa alba, compactiuscula, illa stipitis fibrosula fuscescens, tenax.

Hab. Inter muscos hepaticasque in pratis atque sylvis in *Staten island*, Mart. 1882.

Obs. Specimen etiam in *Basket island* (9 Maj. 82) hujus

speciei inveni, vix a typo recedens statura paululo majore, lamellisque e fuscescenti-fulvis ad ochraceum vergentibus. Pluribus characteribus haec species *Ag. scambo* Fr. accedens. Sporae non visae; cystidia lanceolato-clavata, apice acutissima, in parte supera rugoso-verruculosa (50-60 × 10-12 μ), hyalina.

29. Agaricus (*galera*) pseudotener Speg. (n. sp.)

Diag. Pileus tenuis, primo campanulato-acutatus, margine subincurvus, dein gradatim expansus (1-2″ diam.), centro semper acute umbonatus, glaberrimus, laevissimus, fulvescenti-melleus, medio ac super lamellas obscurior, praecipue in senectute (ac facile striatus visus); lamellae pileo concolores, utrinque obtusiuscule attenuato-acutatae, dimacriae, acie integrae, deorsum acutato-subsinuatae; stipes teres (3-3,5″ long. × 2‴ crass.), late fistulosus, rectus v. flexuosus, glaber, laevis, pileo concolor, fragilis, deorsum parum incrassatus, non v. vix pruinuloso-radicatus.

Hab. Ad muscos folia ramentaque putrida in sylvis uliginosis, *Staten island,* Mart. 1882.

Obs. Pileus et lamellae tenui-membranacea, subhygrophana. Species *Ag. tener* Schaeff. peraffinis, pileo acuto praecipue recedens.

30. Agaricus (*galera*) tener Schaeff.— Speg., Fung. pat. n. 18.

Hab. Non rarus in herbosis in *Staten island* et prope *Ushuvaia,* Mart. et Maj. 1882.

31. Agaricus (*tubaria*) privignus Speg. (n. sp.)

Diag. Pileus primo conico-subcampanulatus, dein subapplanato-expansus (0,5-1″ diam.), rarius subconcavus, laevissimus, glaberrimus, crassiuscule membranaceus, fulvo-v. rubro-cinnamomeus saepeque ferrugineo-au-

rantius, margine rectus, acutus; lamellae strictissimae polymacriae, antice acutatae, postice subattenuato-truncatae, adnatae, non decurrentes, pileo concolores v. vix pallidiores; stipes longissimus (5-6″ long. × 2-4‴ diam.), sursum sensim attenuatus, rectus v. rarius vicies tortus, fibrosulus, substriatus v. laevis, glaberrimus, tenax, basi subincrassatulus, obtusus, pileo concolor. Sporae ovoideo-v. elliptico-subglobosae (9-10 × 6-7 μ), laeves, ferrugineae inferne non v. vix acutatae.

Hab. Ad *Sphagna* in paludosis insulae *Staten* et per *Fuegia* tota, aest. et hiem. 1882.

Obs. Species *Ag. paludoso* Fr. nec non *Ag. stagninus* Fr. peraffinis sed satis riteque distincta.

32. Agaricus (*crepidotus*) brunswickianus Speg.— Fung. pat. n. 19.

Hab. Ad truncos dejectos putrescentes *Mayteni magellanicae* in *Onnivaia* sub *M. Darwin*, Jun. 1882.

33. Agaricus (*crepidotus*) forsteri Speg. (n. sp.)

Diag. Solitarius; pileus applanatus (10-12‴ diam.), margine rectus, tenui membranaceus, glaberrimus, laevis, non v. vix ambitu irregulariter sulcatus, subhygrophanus, pallidissime sordideque fulvo-griseus; lamellae confertiusculae, planae, dimacriae, tenui-membranaceae, utrinque acutae, stipite subadnatae, acie integrae, rectae, fusco-fuligineae; stipes parvulus, teres (5‴ long. × 0,5-1‴ crass.), leniter excentricus, incurvus, tenuis, glaber, laevis, fusco-fuligineus, insititio-adnatus, vix ima basi anulatim pruinulosus.

Hab. Ad folia culmosque putrescentia *Poae Forsteri* in scopulis ad ostia *Port Cook, Staten island*, Mart. 1882.

Obs. Pileus e latere saepius emarginatus v. subabortivus; species pulchella, tenacella, fuscescens mox dignoscenda.

34. Agaricus (*stropharia*) stercorarius Fr. — Speg., Fung. pat. n. 21.

Hab. In fimo vaccino putrescente in pratis prope *Ushuvaia*, Maj. 1882.

35. Agaricus (*hypholoma*) appendiculatus Bull.— Fr., Hym. eurp. p. 296.

Hab. Ad truncos vetustos putrescentes ad marginem sylvarum in *Ushuvaia, Beagle Channel*, Maj. 1882.

Obs. Pileus primo ovatus, obtusus, ambitu repandus, stipite adpressus, griseo-fuscus, glaberrimus, margine tela albicante appendiculatus; stipes pro ratione curtus, crassus, fistulosus.

36. Agaricus (*psilocybe*) coprophylus Bull—Fr., Hym. eurp. p. 299, n. 1130.

Hab. In fimo viccino vetusto in pratis prope *Ushuvaia*, Maj. 1882.

Obs. Mediocris, solitarius v. saepius 3-12 laxe gregarius; pileus hemisphaericus, varie ac plus minusve undulatus depressusve, laevissimus, glaberrimus, non v. vix obtusissime umbonatus castaneus v. testaceus, udus ambitu plus minusve evidenter striatus; lamellae crassiusculae, subdistantes, latiusculae, polymacriae, in juventute pileo pallidiores, in senectute fusco-lividae, antice obtuse acutatae, postice latae truncatae, adnatae, denticulo subdecurrentes (rarius subsinuatae), acie integrae, crassiusculae; stipes farctus, rectus v. flexuosulus, teres plus minusve elongatus, pileo concolore, laevissimus, glaberrimus, basi mycelio late expanso, albescente ornatus. Caro pileo concolor, succoso-flaccida.

Forma fuegiana a typo ut videtur nonnihil recedens. Sporae ellipticae v. ovoideae (18×10 μ), utrinque acutiusculae, laeves, sordide fusco-ferrugineae.

37. Agaricus (*paneolus*) papilionaceus Fr.—Speg., Fung. pat. n. 24.

Hab. Vulgatissimus in fimo vaccino prope *Ushuvaia* et in fimo *Aucheniae guanaci* in *Slogget bay*, Maj. et Jun. 1882.

38. Coprinus (*veliformis*) flosculus Berk.

Hab. In fimo vetusto putrescente *Aucheniae guanaci* in sylvis prope *Slogget bay*, Jun. 1882.

39. Coprinus (*veliformis*) levipes Speg.—Fung. arg. pug. IV, n. 28.

Hab. In fimo vaccino subputrescente in pratis prope *Ushuvaia*, Maj. 1882.

40. Coprinus (*pelliculosus*) truncorum Schaeff. — Speg., Fung. arg. pug. II, n. 9.

Hab. Ad truncos cariosos putrescentes in sylvis *Smoke island*, Jun. 1882.

Obs. Specimina fuegiana a typo statura robustiore nonnihil recedunt; mycelium tabacino-gossypinum venosum longe lateque per matricem serpens.

41. Coprinus (*veliformis*) stercorarius Fr.— Hym. eurp. p. 330, n. 45.

Hab. In fimo vaccino vetusto vulgatissimus prope *Ushuvaia* et *Gabel island*, Maj. 1882.

Obs. Primo totus farinaceo-albus, ovato-cylindraceus, mox applanato-expansus (1‴ diam.) nudus griseus, centro obscurior, dense radiatim plicato-striatus; stipes brevis, albus, glaber v. farinaceo-pruinulosus.

42. Cortinarius (*phlegmacium*) Sarmienti Speg. (n. sp.)

Diag. Pileus primo hemisphaerico-subglobosus dein expansus (4-6″ diam.), subumbonatus, margine undulatus,

acutus, rectus, integer v. repandus, laevissimus, glaberrimus, strato mucoso vestitus, centro flavus v. melleus, ambitu pallidior; lamellae trimacriae, confertiusculae, membranaceo-tenacellae, subcrassiusculae, antice attenuato-acutatae, postice truncato-rotundatae, adnanatae non v. vix denticulo decurrentes, albo-subcarneae v. pallidissime subfulvae, rugulis v. appendicibus minutis verticalibus percursae; stipes validus, farctus, longiusculus, deorsum incrassatulus (5-8″ long. $\times$ 1″ sup. crass. = 1,5-2″ infr. crass.), tereti-compressus, rectus, laevis, v. longitudinaliter minutissime fibrillosus, ex albo ceraceus v. pallide melleus, subnitens, tenacellus, ad quartum superum anulatus. Caro compactiuscula, aquosa, alba, a cute pilei nec non a lamellis facile separanda. Velum submembranaceum siccum album majusculum.

Hab. Inter folia sternata sub nive duo specimina frigore rigentia prope *Fiord Negri* ad basin *Montis Sarmiento* tantum inveni, Maj. 1882.

Obs. Species habitu *C. turmali* Fr. satis affinis; basis stipitis mycelio parco, albo, gossypino donata. Sporae elliptico-obovatae, superne acutiuscule rotundatae, inferne inaequilateraliter acutato-subapiculatae (10 $\mu \times$ 5-6 μ), grosse 1-guttulatae, pallide ferrugineae, episporio laxe subimperspicueque undulato-subverruculoso.

43. Cortinarius (*phlegmacium*) magellanicus. Speg. — Fung. pat. n. 31.

Hab. Ad terram humosam sylvarum in *Gertrude cove* et in *Picton island*, Maj. 1882.

44. Cortinarius (*myxacium*) aiacaphae Speg. (n. sp.)

Diag. Pileus hemisphaerico non v. vix explanatus (4-5″ diam.), centro plus minusve parce umbonatulus, margine incurvulus, centro griseo-subrufescens, ambitu

violascens, virgatulus, crasse viscosus; stipes elongatus, teres, deorsum gradatim parceque incrassatus (7-8″ long. × 8‴ diam. sup. = 12‴ diam. inf.), sub apice striatulus candidus, medio violascens, inferne sordide albus, laevis, basi obtuse rotundatus, mycelio parco hispidulo donatus; lamellae sublanceolatae, antice acutato-rotundatae, postice sinuato-truncatae adnatae, stipite tamen secedentes, acie integerrimae, primo albo-fuscae, dein subcinnamomeae. Caro primo compactiuscula, dein acquosa, subdiffluens. Velum submembranaceum, anulatum, latiusculum, ad sextum superum stipitis adfixum, plicatulum candidum.

Hab. Ad marginem sylvarum inter gramina in *Iandagaia, Beagle Channel,* Maj. 1882.

Obs. Totus fungus in juventute violascenti-albus, muco hyalino crasse vestitus. Sporae ellipticae, utrinque obtusiusculae (10-12 × 5-6 μ), episporio laxe minuteque asperulo, ferrugineae.

45. Cortinarius (*myxacium*) tundrae Speg. (n. sp.)

Diag. Elasticus, 2-3-gregarius saepe etiam basi subconnato-coespitosus; pileus primo subhemisphaerico-campanulatus, e mutua pressione saepe irregulariter angulatus, margine non v. vix involutus, dein explanatus (3-4″ diam.), centro nonnihil depressus, margine rectus v. incurvus (rarissime substriatus), laevissimus glaberrimus, centro plus minusve intense fuscus v. fusco-olivascens rarius fusco-violascens, caeterum pulchre castaneus, ferrugineus v. fulvus non rarius saepe ambitu griseo-violascens, in juventute v. udus viscoso-glutinosus; lamellae ferrugineae, acie integerrimae violascentes, polymacriae, subdistantes, utrinque parce subabrupteque attenuatae, non v. vix acutiusculae; stipes tereti-obclavatus (apice 0,5″ diam., basi 1″ diam.), mediocris (3-3,5″ long.) glaberrimus, laevissimus, basi incrassato-

rotundatus, ad parten dimidiam superam coeruleus, caeterum sordide albus, pruinulosus; velum e stipite descendenti-adscendens, pulchre molliterque gossypino-sericeum, coeruleum, saepe ob pilei viscositatem diffluentem glutinosus, mox per aetatem evanescens.

Hab. Inter muscos, hepaticas aliasque plantas tundrae alpinae prope *Port Cook, Staten island,* Mart. 1882.

Obs. Cutis pilei facile secedens; caro pilei tenuis ex albo-fuscescens, parum sub sectione mutabilis, compactiuscula subexsucca; illa stipitis corticalis fibrosa tenacella violascens, interna subspongiosa alba. Odor saporque nulli.

46. Cortinarius (*myxacium*) russulariellus Speg. (n. sp.)

Diag. Delibutus, solitarius; pileus applanato-expansus (2,5″ diam.), laevissimus, margine pulchre involutus, integer, albus, centrum versus roseo-œnocyanescens, non hygrophanus, epidermide crassiuscula facile secedente vestitus, umbone destitutus; lamellae primo albae v. ceraceae, dein pallide rubiginosae, antice attenuatae subcircinatae, medio latiores, postice subattenuatae, adnato-sinuatae, subcrassiusculae, acie minutissime denticulato-serrulatae; stipes teres (3-4″ long. × 1″ crass.), ad quartum superum anulo submucoso-fluxili aegre perspicuo donatus, albus, non bulbosus, supra anulum minute punctulato-substriatulus, caeterum laevis, apice infero obtuse rotundatus, non v. vix radicatus, farctus.

Caro pilei compacta ad marginem nulla centro parce incrassatula, succosa, alba sub sectione fuscescens, cum illa stipitis fibrosula continua.

Basidia clavulato-pyriformia (15-18 × 5 μ), hyalina, 3-4-sterigmatophora; sporae ellipticae v. ovoideae, inferne subangulato-acutatae, dense minuteque ruguloso-verruculosae (8 × 5 μ), pulchre rubiginosae.

Hab. Ad terram in pratis in *Staten island* vulgatissimus, Mart. 1882.

47. Cortinarius (*myxacium*) antarcticus Speg. (n. sp.)

Diag. Delibutus, solitarius v. hinc inde 2-3-gregarius; pileus primo hemisphaerico-subglobosus, obtuse rotundatus, margine involutus, fusco-carneus, dein applanato-expansus (4″ diam.), centro vix depressus, margine prominulus obtusus, subinvolutus, centro pallide sordideque fusco-carneus, ambitu albus, laevissimus, glaberrimus, in juventute strato mucoso hyalino vestitus; lamellae candidae acie integerrimae (vix in juventute subpruinuloso-denticulatae), antice acutato-attenuatae, medio latiores, postice attenuato-rotundatae, a stipite discretae, cum pileo continuae; stipes teres, sursum vix leniter attenuatus (5-5,5″ long. × 1″ crass.) deorsum attenuato-acutatus, farctus, albus, laevissimus, basi tenuiter gossypino-pruinulosus, radicatus; velum mucoso-opalinum, ex apice descendens e medio adscendens ac usque ad pilei marginem productum adnatumque, per aetatem mox evanescens.

Hab. Inter muscos hepaticasque subinfossus in pratis uliginosis collinis v. alpinis prope *Port Cook, Staten island,* Mart. 1882.

Obs. Caro pilei alba, compacta, immutabilis, subtenuis centro excepto.

48. Cortinarius (*myxacium*) Darwinii Speg. — Fung. pat. n. 33.

Hab. In sylvis prope *Iandagaia* et *Ushuvaia*, Maj. et Jun. 1882.

49. Cortinarius (*myxacium*) tarnensis Speg. — Fung. pat. n. 32.

Hab. In sylvis inter folia putrescentia prope *Wallamátu, Shâmmacus* et *Ushuvaia,* Maj. 1882.

50. Cortinarius (*inoloma*) albo-violaceus (Pers.) Fr. — Hym. eurp. p. 361, n. 95.

Hab. Vulgatus in pratis montanis in *Staten Island*, (Mart.) et rarus in montuosis *Wallalánuk* (Maj.) 1882.

Obs. A typo recedit statura nonnihil majore, lamellis subroseis v. pallide sordideque ferrugineis, subperlatis, acie grosse irregulatiterque eroso-denticulatis.

51. Cortinarius (*dermocybe?*) difficilis Speg. (n. sp.)

Diag. Pileus primo hemisphaericus dein modice explanatus (1,5″ diam.), exumbonatus, laevis, centro glaber, ambitu araneoso-subsquamulosus, sordide fulvo-ceraceus v. dilute ochraceus; lamellae crassiusculae, albae, antice acutiuscule obtusatae, postice sinuatae v. strictissime adnato-sinuatae, 2-3-macriae, acie integrae; stipes cavus, teres, rectus, breviusculus pro ratione crassus (2″ long. × 0,5″ crass.), basi truncato-rotundatus, non v. vix araneoso-gossypinus, parcissime radicatus, sordide pallideque albo-ceraceus. Caro stipitis pileique alba, duriuscula. Velum ab initio candidum pileo atque stipiti adnatum, fibroso-gossypinum, dein sordide pallescens, a stipite secedens ac squamulose v. fimbriatim e margine pilei pendulum.

Hab. Non communis inter muscos in sylvis subvirgineis in *Staten island*, Mart. 1882.

52. Cortinarius (*dermocybe*) Hookeri Speg. — Fung. pat. n. 34.

Hab. In sylvis montanis inter *Agaia* et *Bridges fiord*, Jun. 1882.

53. Cortinarius (*dermocybe?*) striolatus Speg. (n. sp.)

Diag. Solitarius sed saepius subcoespitosus; pileus primo hemisphaerico-campanulato, margine non v. vix curvu-

lus, dein gradatim expansus (0,5-2″ diam.), in senectute saepe fissus ac revolutus, medio semper plus minusve obtuse umbonatus, siccus fulvo-melleus v. fulvobadius, udus centro obscurior margine densiuscule striatus (supra lamellas), laevis, glaber, subhygrophanus; lamellae pileo concolores v. pallidiores, dimacriae, antice obtusiuscule acutatae, postice attenuato-sinuatae, medio latiores, acie integerrimae; stipes longiusculus, plus minusve gracilis (2-6″ long. × 1-3‴ diam.), fistulosus, fibroso-tenacellus, fissilis, glaber, laevis, vix in juventute sub apice atque ad basin albo-pruinulosus. Caro fibrosula, aquosa, tenuis, hygrophana pileo concolor. Velum mox evanescens, in prima juventute margine pilei stipiteque adnatum araneoso-squamulosum, pallescens.

Hab. Inter muscos lichenesque vulgatissimus in *Staten island* et in *Fuegia* tota (*Hope harbour, London island, Iandagaia, Aicina, Slogget bay*), aest. et ver. 1882.

Obs. Sporae elliptico-ovoideae (5-7 × 3-3,5 μ), inferne angulato-acutatae, crassiuscule tunicatae, laeves, ferrugineae; basidia clavulata (20 × 5 μ), hyalina; cellulae steriles paucae; cystidia nulla.

54. Cortinarius (*telamonia?*) pihiur Speg. (n. sp.)

Diag. Solitarius; pileus explanatus (5″ diam.), grosse umbonatus, obtusus, margine acutus, rectus integer v. rarius hinc inde fissus, glaberrimus, laevissimus, testaceo-castaneus, ambitu saepe lutescenti-fulvus; lamellae lanceolatae, latiusculae, confertiusculae, antice obtusiuscule acutatae, postice rotundato-sinuatae, pallide cinnamomeae v. fulvo-ferrugineae, polymacriae, acie integerrimae; stipes teres, vix deorsum incrassatus (6″ long. × 0,5″ diam. sup. = 1″ diam. inf.), superne lutescenti-fulvus, inferne rufescenti-testaceus, parce

araneoso-squamulosus, farctus v. vix canaliculatus. Caro pilei albo-lutescens acquosula compactiuscula. Velum vix ad tertium inferum stipitis araneoso-squamulosum, fuscescens. Sporae ovoideae (10-14 × 5-6 μ), inferne acutatae, pallide ferrugineae, laxe minutissimeque rugulosae.

Hab. Rarissime ad marginem sylvarum ad oram marittimam glareosam in *Iandagaia*, *Beagle Channel,* Maj. 1882.

55. Cortinarius (*dermocybe*) hygrophoroides Speg. (n. sp.)

Diag. Totus aurantio-miniatus, solitarius v. binatus rarius subcoespitosus; pileus primo hemisphaericus, dein gradatim expansus, convexo-applanatus (1,5-2″ diam.), exumbonatus, laevissimus glaberrimus, non hygrophanus, extrius, pulchre miniatus, margine rectus, integer, vix in senectute minutissime substriatus v. fissus; lamellae latiusculae, utrinque rotundatae, antice minores, crassiusculae, trimacriae, deorsum rotundato-adnatae non v. vix denticulo-decurrentes, acie integerrimae, ex albo aurantiae, pileo pallidiores, carne pilei concretae, illa stipitis discretae; stipes rectus (3″ long. × 0,5″ crass.), deorsum subbulboso-incrassatus, late fistulosus, glaberrimus, laevissimus, aurantio-miniatus ad tertium superum pallidior, basi in juventute albo-gossypino-pruinulosus, per aetatem saepius glabratus.

Caro stipitis cum illa pilei continua, ex albo aurantia.

Hab. Vulgatus in pratis inter muscos hepaticasque per totam *Staten island,* Mart. 1882.

Obs. Velum mox evanescens, in juventute margine pilei tertioque supero stipitis adnatum, lamellis concolor, gossypino-fibrosulum, siccum.

56. Marasmius (*rotula*) androsaceus Fr. — Hym. eurp. p. 477, n. 47.

Hab. Ad folia dejecta sternata *Fagi betuloidis* in sylvis, *Staten island*, Mart. 1882.

Obs. Pileus subconvexus (6‴ diam.), glaberrimus, centro umbilicatus, margine integer subrepandulus, 10-12-striatus, striis utrinque subbifidis, subcarneis, ceterum albus, tenui membranaceus; lamellae tenacellae parvulae polymacriae, longiores marginem aequantes, antice acutiusculae, postice subdilatatulae, subsinuatae, anulatim connatae, albae; stipes filiformis (3″ long. × 0,5‴ crass.), rigidulus, erectus, fistulosus, totus castaneus, sericeo-nitens, basi incrassatulus, insititius, glaberrimus.

57. Marasmius (*rotula*) androsaceus Fr.
var. *Ushuvaiensis* Speg.

Diag. A typo recedit statura vere majore, stipiteque breviore subflexuoso atque nonnihil crassiore. Pileus fulvo-carneus ambitu pallescens, membranaceus (1″ diam.), leniter radiatim striato-plicatulus; lamellae paucae distantes, albae, saepe venoso-connexae; stipes castaneus, laevissimus (2-2,5″ long. × 1-1,5‴ crass.).

Hab. In cortice putrescente truncorum in sylvis prope *Ushuvaia,* Maj. 1882.

58. Marasmius (*rotula*) antarcticus Speg. (n. sp.)

Diag. Solitarius; pileus hemisphaerico-campanulatus (5-8‴ diam.), non umbilicatus, candidus, tenuis subpellucidus, primo laevis, dein 16–20–sulcato–radiatus, sulcis utrinque bifidis, margine rectus, integer, acutus; lamellae tenues, dimacriae, cymbaeformes, antice acutae marginem pilei attingentes, postice rotundato-sinuatae stipite adpressae, candidae; stipes teres filiformis (3-4″ long. × 0,5‴ crass.), glaberrimus, ad tertium superum candidus, ceterum rufescenti-castaneus, opacus, flexilis, non rigidus, basi insititius.

Hab. Ad ramenta putrescentia *Fagi betuloidis* prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. An tantum *M. splachnoidis* Fr. varietas?. Hujus speciei forma nonnihil minor in *Hope harbour* (*Clarence island*) hieme etiam inventa.

59. Marasmius (*rotula*) sphaerodermus Speg. — Fung. pat. n. 36.

Hab. Ad folia dejecta putrescentia *Berberidis buxifoliae* in *Aicina* insula, *Beagle Channel*, Maj. 1882.

Obs. In folis dejectis *Pernettiae mucronatae*, *Fagi betuloidis*, *Embotrii coccinei* nec non *Mayteni magellanicae* vulgatissima adest species, hujus forma tantum facile sed semper sterilis ac pileo deficiens.

POLYPOREAE Fr.

60. Laschia antarctica Speg. (n. sp.)

Diag. Pileus ex orbiculari dimidiatus, parvulus (5-10‴ diam.), carnosulus (0,5‴ crass.), applanato-convexulus, margine integerrimus atque incurvulus, obtusiusculus, postice cordatus v. subreniformis, saepe strictissime marginatus ac depressulus, glaberrimus, laevissimus, in vivo albus, opacus, tener, in sicco contractulo-subinvolutus, spadiceus, rigidulus; stipes breviusculus (3-6‴ long. $\times$ 0,4-0,7‴ crass.), albus teres, apice non v. vix compressus, basi abrupte truncato-innatus non v. vix fuscescens, glaber, laevis; hymenium planum, aequale, album v. pallidissime alutaceum; pori mediocres (0,2-0,4‴ diam.), ore exagono-rotundati, breviusculi, dissepimentis crassiusculis acie integris donati. Basidia clavulata (25-27 $\times$ 8-10 μ), utrinque rotundata, 2-3-ste-

rigmatibus breviusculis donata, cellulis sterilibus clavulatis (20-24 × 5-6 μ), parcis inmixta; cystidia majuscula, clavata (30-35 × 12 μ), antice late rotundata, dense minuteque asperula, postice attenuato-pedicellata, laevia, hyalina; sporae ovatae, utrinque rotundatae (8 × 5 μ), inferne minute angulato-subapiculatae, hyalinae.

Hab. Ad truncos ramosque emortuos *Berberidis ilicifoliae* in *Pactolus bay, Staten island,* Mart. 1882.

61. Fistulina antarctica Speg. — Fung. pat. n. 46.

Hab. Vulgatissima in sylvis ad truncos *Fagi antarcticae* et *Fagi betuloidis* in *Staten island* et per tota *Fuegia*, aest. et hiem. 1882.

Obs. Species ab incolis *áman* vocata, cibum deliciosum illis praebens. Forma hiemalis saepius magnitudine vere mirabilis ac magis carnosa.

62. Polyporus (*pleuropus*) fuegianus Speg. (n. sp.)

Diag. Lentus; pileus subconchatus, antice regulariter rotundatus, postice subcordato-truncatus (6-7″ diam. trans. × 4-5″ diam. ant.-post.), in pedicello non v. vix evoluto, crasso (1″ diam.), concolore, non v. minutissime, rufo-velutinus productus, carnosulus (1-1,5″ crass.), superne glaberrimus laevissimus helvolo-gilvus, inferne poris mediocribus (5‴ long. × 0,3-0,4‴ diam.), cinnamomeo-fuscis v. sordide griseis, ore rotundatis, subregularibus, dense stipatis, non decurrentibus, ambitu zona strictiuscula sterili ornatus, margine integerrimus, acutiusculus. Caro in viva sordide alba, in sicco pallidissime subspadicea, compacto-elastica, crassiuscula (2-4‴ crass.), hymenio arcte adnata.

Hab. Ad truncos *Fagi antarcticae* et *Fagi betuloidis* in sylvis prope *Ushuvaia* et *Slogget bay*, Maj. 1882.

Obs. Species *Polyporo vario* Fr. peraffinis et facile ejus-

dem varietatem tantum sistens. Incolae *Fuegiae* illam crudam comedunt et *pushárarum* vocant.

63. Polyporus (*merisma*) sulfureus Fr.— Hym. eurp. pag. 542, n. 67.

Hab. Ad truncos *Fagi betuloidis* prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Forma fuegiana a typo europeo nonnihil recedens. Pileus ungulato-dimidiatus, postice irregulariter adnatus, antice crassissimo, grosse obtuseque marginatus, superne laevis, vix hinc inde rugoso-scrupulosus, molliter subimperspicueque velutinus, azonus, ex albo pallidissime melleus, magnitudine ludens; hymenium e tubulis albis brevissimis (1-3‴ long.), dense stipatis, ore minutis, rotundatis compositum. Caro pilei compactissima rigido-fragilis, in vivo subflocculosa, in sicco friabilis, semper candidissima.

64. Polyporus (*apus*) australis Fr. — Speg., Fung. pat. n. 37.

Hab. Ad truncos *Fagi antarcticae* in sylvis prope *Ushuvaia* et *Slogget bay*, Maj. et Jun. 1882.

65. Polyporus (*apus*) fomentarius Fr. — Hym. eurp. p. 558, n. 130.

Hab. Vulgatus ad truncos *Fagi betuloidis* et *Fagi antarcticae* in sylvis totius *Fuegiae*, aest. et hiem. 1882.

66. Polyporus (*apus*) ignarius Fr. — Hym. eurp. p. 559, n. 132.

Hab. Non rarus in sylvis prope *Ushuvaia* et *Slogget bay*, hiem. 1882.

Obs. Haec species et duo praecedentes incolae Fuegiae *pat-áman* vocant.

67. Polyporus (*apus*) hispidus Fr. — Hym. eurp. p. 551, n. 105.

Hab. Non rarus ad truncos *Fagi antarcticae* prope *Ushuvaia*, Maj. 1882.

Obs. Incolae hanc speciem *tacícashin-áman* vocant et illam etsi sat tenacem comedunt.

68. Polyporus (*apus*) antarcticus Speg. (n. sp.)

Diag. Inodermeus; pileus coriaceus, subtenuis, rigidulus, dimidiato-expansus, applanato-convexulus, ambitu integerrimus, acutus, non v. repandulus, postice, truncato-adnatus, plus minusve decurrenti effusus (2–3″ diam. ant.-post. × 4-5″ diam. trans.), superne velutino-puberulus, subviréscenti-v. fulvescenti-tabacinus, zonis strictiusculis, glabriusculis, rubescenti-testaceis v. testaceis, concentricis plus minusve dense notatus, contextu (1-2‴ crass.), laxe fibroso-flocculoso, albescenti-alutaceo, cute tenuissima subheterogenea arcte adnato donatus; hymenium flavescenti-fulvescens v. fulvum, e tubulis breviusculis (1-2,5‴ long.), intus pallidioribus stratosulis a pileo non v. vix aegre secedentibus, ore regularibus, rotundato-angulosis (200 μ diam.), dissepimentis tenuibus, acie acutis, integris laevissimis donatis efformatum.

Hab. Ad palos vetustos putrescentes in sylvis prope *Sloggei bay*, Jun. 1882.

Obs. Species *Polyporo versicolori* Fr. peraffinis; an tantum forma ejusdem flavescens?

69. Polyporus (*apus*) velutinus Fr. — Hym. eurp. p. 568, n. 170.

Hab. Ad truncos nec non palos vetustos in *Staten island* et prope *Ushuvaia*, Mart. et Maj. 1882.

Obs. Specimina fuegiana a typo nonnihil recedunt, crassi-

tudine ac rigiditate majore, pubescentia pilei minus evoluta ac margine abrupte acutato.

70. Polyporus (*apus*) versicolor Fr. — Speg., Fung. pat. n. 44.

Hab. Ad palos vetustos tuguriorum incolarum prope *Ushuvaia* in *Gertrude cove* et in *Picton island*, Maj. 1882.

Obs. Formas duo observavi: *a*) pileis glaberrimis, totis fusco-vinoso tinctis vix margine albescentibus, radiatim minute fibroso-rugulosis hymenio albo-subalutaceo; *b*) pileis zonatis, zonis aliis albis velutinis, aliis glabris sordide fusco-vinosis, hymenio sordide ex albo cinerascente.

71. Polyporus (*resupinatus*) crustosus Speg. (n. sp.)

Diag. Decurrenti-effusus (20–50″ diam.) margine determinatus, irregulariter repando-lobatus, non reflexus sed subliber, acutus, matrice arcte adnatus ac fere inseparabilis, in vivo coriaceo-flexilis, tenaciusculus, in sicco rigido-fragilis, tenuiusculus (0,5-1‴ crass.), totus intus extusque ferrugineo-testaceus v. rufescenti-tabacinus; pori totam superficiem occupantes, vix margine evanescentes ac zonam plus minusve latam et manifestam sterilem relinquentes, decurrenti-obliqui, lacero-difformes, magnitudine ludentes, dissepimentis parum elevatis, quandoque acutis, cristulatis, quandoque crassis, obtusis, integris, subpruinulosis donati.

Hab. Ad corticem arborum annosarum in sylvis prope *Slogget bay*, Jun. 1882.

Obs. Species *Polyporo obliquo* Fr. et *P. ferruginoso* Fr. affinis ac fere intermedia, ab utroque satis abhorrens ac valde variabilis.

72. Polyporus (*resupinatus*) medulla-panis (Pers.) Fr. — Hym. eurp. p. 576, n. 211.

Hab. Ad truncos vetustos cariosos in *Staten island* prope *Port Cook*, Mart. 1882.

73. Polyporus (*resupinatus*) stillicidiorum Speg. (n. sp.)

Diag. Repenti-effusus, irregulariter expansus, lobatus v. repandus, saepe superpositionis causa hinc inde pseudostratosus, margine determinatus, nec liber, nec reflexus, nec sterilis sed obtuse rotundatus, in vivo albus v. albo-subhyalinus, tenerrimus, in sicco non contractus nec diffractus, albo-pallescens v. pallidissime rubescens, opacus, rigidus, fragilis, semper tenuiusculus (1-1,5''' crass.), contextu myceliali tenui, membranaceo cum hymenio continuo; pori recti v. vix obliqui, breviusculi (0,5-1''' long.), ore rotundis v. elongatis, minutis (150-170 μ diam.), regularibus, densissime constipatis, dissepimentis tenuibus, acie integris.

Hab. In stillicidiis montanis ad terram nec non cryptogamas incrustans in *Staten island*, Mart. 1882.

Obs. Species in vivo *Polyporo mucido* Fr. nec non *P. medulla-panis* Fr. peraffinis, sed satis ab utroque abhorrens praecipue in sicco.

74. Polyporus (*resupinatus*) vulgaris Fr.— Hym. eurp. p. 577, n. 216.

Hab. Ad ramos dejectos corticatos v. decorticatos in sylvis prope *Ushuvaia*, Maj. et. Jun. 82.

Obs. Adest forma subcorticalis hinc inde per poros epidermidis erumpens, ac glomerulos candidos sparsos (3-5''' diam.), subpulvinatulos, zona plus minusve lata sterili puberulo-velutina concolore cinctos efformans; an melius forma *Polypori mollusci* Fr.?

75. Polyporus (*resupinatus*) vaporarius Fr.—Hym. eurp. p. 579, n. 221.

Hab. Ad truncos nec non ramos decorticatos *Fuchsiae*

magellanicae et *Berberidis ilicifoliae* prope *Hope harbour* in *Clarence island*, Maj. 1882.

76. Polyporus (*resupinatus?*) decorticans Speg. (n. sp.)
Diag. Tenuissimus, primo mucoso-membranaceus, continuus dein densissime porosus, poris minutissimis (150-170 μ. diam.), brevissimis trama fere nulla v. vix arachnoidea insidentibus, albus in vivo, in sicco sordide pallidissimeque fulvescens, non contractus nec diffractus, sub epidermide ramorum late vageque effusus ac utrinque adnatus, per aetatem, cortice transverse fissa, nudus, ac labiis rimarum revolutis tantum adnatus.
Hab. Ad ramos dejectos putrescentes *Fagi betuloidis* in sylvis prope *Slogget bay*, Jan. 1882.
Obs. Species a genere nonnihil desciscens distinctissima, rimis epidermidis transversalibus, labiis late hiantibus ac revolutis, utrinque acutis mox dignoscenda.

HYDNEAE Fr.

77. Grandinia corrugata Fr. — Hym. eurp. p. 625.
Hab. Ad ramos emortuos putrescentes *Fagi antarcticae* in sylvis in *Staten island* et in *Fuegia* prope *Ushuvaia* et *Slogget bay*, aest. et hiem. 1882.
Obs. A typo recedit papillis magis evolutis ac saepius obliquis. An species nova?

78. Odontia barba-jovis (With.) Fr. — Hym. eurp. p. 627.
Hab. Ad ramos decorticatos putrescentes *Fagi* cujusdam in *Skyring island*, Jun. 1882.

THELEPHOREAE Fr.

79. Stereum desolationis Speg. (n. sp.)
Diag. Pilei effuso-reflexi, conchati, latiusculi (3-5″ diam. trans. × 2″ diam. ant.-post.), tenues mem-

branaceo-pergamenei, rigidi, superne primo villosuli, concentrice obsolete zonati, sordide albo-canescentes, per aetatem subglabrati ac pallide subtestacei, margine acuti, non v. vix repanduli, hinc inde minute fissi v. subfimbriati, hymenio lutescenti-purpurascente, azono, glabro v. basin versus subpubescente donati.

Hab. Ad truncos dejectos putrescentes in *Brecknok pass*, Maj. 1882.

80. Stereum hirsutum Fr.— Hym. eurp. p. 639.

Hab. Ad truncos vestutos putrescentes in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

Obs. Formae fuegianae saepius late effusae, plus minusve reflexae, hymenio quandoque rufescente quandoque ex albo-lutescente donatae.

81. Stereum purpureum Fr.— Hym. eurp. pag. 639.

Hab. Ad palos nec non ramos putrescentes vulgatum per *Fuegia* tota, aest. et hiem. 1882.

82. Stereum rigidulum Speg. (n. sp.)

Diag. Pilei tenues, pergameneo-membranacei, rigiduli, liberi (1,5″ diam. trans. $\times$ 0,7-1″ diam. ant.-post.), dimidiato-cordati v. cuneato-obovati, gregarii sed rarius confluentes v. connati, postice dilatatulo-adnati, non v. vix effusi, superne adpresse villoso-hirsuti, non v. grosse obsoleteque zonati, deorsum fusco v. subtestaceo-canescentes, ambitu pallidiores, margine acuti repanduli v. vix lobulati, hymenio plano, laevi, purpurascente v. livido, azono, marginem versus pallidiore, in juventute carneo-pruinuloso donati.

Hab. Ad ramos dejectos *Fagi betuloidis* in sylvis prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. An huc ducendum *Ster. amoenum* Lév. (non Kalkbr.!)?

83. Stereum rubiginosum Fr. — Hym. eurp. p. 641.
Hab. Ad ramos emortuos *Fagorum* in sylvis prope *Ushuvaia*, Maj. 1882.

84. Stereum rugosum Fr.—Hym. eurp. p. 643.
Hab. In sylvis per *Fuegia* tota ad ramos *Fagorum*, aest. et hiem. 82.

85. Stereum Sarmienti Speg. (n. sp.)
Diag. Pilei solitarii v. laxe gregarii, subscutato-resupinati (1-2″ diam.), ex orbiculari difformes, subliberi, reflexi, lignosi, duri crassiusculi, extus glabri sordide testaceo v. testaceo-canescentes, margine parce repandulo (subcrispato in sicco) non v. vix pruinuloso, hymenio plano v. undulato in juventute pallide rufescente, carneo-pruinuloso, per aetatem stratose reviviscente, stratis inferis sordide testaceis.
Hab. Ad truncos vestutos *Fagi antarcticae* sub *Monte Sarmiento* in *Fiord Negri*, Maj. 1882.
Obs. Species pulchella primo intuitu pro forma senescentes *Sterei rugosi* Fr. facillime adhibenda.

86. Stereum sericeo-nitens Speg. (n. sp.)
Diag. Pilei sparsi v. laxe aggregati, saepe confluentes, coriacei, rigiduli, effuso-reflexi v. subcupulato-resupinati (2-3″ diam.), margine acuti, superne dense laciniato-lobati, extus adpresse puberuli v. subvillosi, postice rufescenti-subtabacini, antice canescentes, sericeo-nitentes non v. vix obsolete zonati, hymenio plano v. spurie undulato v. tuberculoso lutescenti-carneo, primo parce albo pruinuloso donati.
Hab. Ad truncos dejectos putrescentes *Fagorum* in sylvis prope *Ushuvaia*, Jun. 1882.

87. Stereum tabacinum Fr.— Hym. eurp. p. 641.

Hab. Ad ramos dejectos putrescentes in sylvis in *Staten island* et prope *Slogget bay,* Mart. et Jun. 1882.

Obs. Forma fuegiana saepius e rimis epidermidis erumpens ac adnato-effusa margine fibroso-radiata.

88. Stereum variolosum Speg. (n. sp.)

Diag. Pilei scutato-resupinati v. effusi, late arcteque matrici adnati, solitarii v. gregarii ac confluentes, ambitu stricte marginato-reflexi (2-3″ diam.), extus parce atque grosse fibroso-villosi ligneo-pallescentes v. pallide rufescentes, hymenio laevi, plano v. spurie undulato et tuberculato, azono, pallide lutescente v. carneo-lutescente non v. vix pruinuloso, punctis minutissimis (saepe vix lente tantum conspicuis) rufescentibus laxe adsperso donati.

Hab. Ad truncos dejectos putrescentes in *Staten island,* Mart. 1882.

89. Cora? Bovei Speg. (n. sp.)

Diag. Pilei densiuscule gregarii v. subimbricati, dimidiato-sessiles, spathulati v. irregulariter reniformes, subconchati, undulato-crispati saepeque subinvoluti, magnitudine ludentes (1-5″ diam. trans. × 1-2,5″ diam. ant.-post.), margine integri v. repando-lobulati, obtusi, tenui cartilagineo-membranacei, coriacelli, superne sordide griseo-virescentes inferne cinerei, utrinque dense obsoleteque concentrice-fusco-zonati, primo glabri dein pruinulosi. Sporae non visae.

Hab. Vulgatissima, ramos ac muscos incrustans, in dumetis pratisque montanis in *Staten island,* Mart. 1882.

Obs. Species pulchella, hymenio continuo (in areolas non diffracto) ac sterili semper inventa, contextu dense fibroso-chlorino donata, per exsiccatione rigido-fragilis ac minute denseque (sub lente) nigro-punctulata. An huc

C. gyrolophia Mntgn. in Gay Fl. Chil. vol. VII, p. 380 ducenda?

90. Corticium amorphum Fr.— Hym. eurp. p. 648.
Hab. Ad ramos dejectos putrescentes in sylvis prope *Ushuvaia*, Jun. 1882.
Obs. Specimina insulae Statuum hymenio sordide alutaceo-carneo, Ushuvaiensia autem hymenio purpurascente donata. An species duo differentes?

91. Corticium? antarcticum Speg. (n. sp.)
Diag. Pilei primo cupulato-erumpentes, subcampanulati, dein effuso-dilatati, plus minusve matrice arcte lateque adnati, ambitu liberi, reflexi (in sicco revoluti), saepeque confluentes, irregulariter anguloso-orbiculares (2-4″ diam.), coriacelli, crassiusculi, extus sordide castanei v. subnigricanti-testacei, azoni glabri, non v. vix margine puberuli, acuti, sublobulato-repanduli, hymenio plano, subceraceo, crassiusculo, corneo, in juventute albo-pruinuloso, in sicco densiuscule rimulo-diffracto donati.
Hab. Ad ramos dejectos putrescentes in *Picton island*, Jun. 1882.

92. Corticium auberianum Mont.— Fl. Cub. IX, p. 226.
Hab. Ad corticem truncorum viventium *Drymidis* vulgatum in *Staten island*, Mart. 1882.
Obs. Specimina fuegiana spongiosulo-gossypina, fragillima, candida, sterilia, facillime evanescentia.

93. Corticium calceum Fr.— Hym. eurp. p. 652.
Hab. Ad ramulos dejectos putrescentes *Fuchsiae* et *Berberidis* in *Hope harbour*, Maj. 1882.

Corticium? crispatum Speg. (n. sp.)

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Diag. Pilei primo erumpentes, subcampanulati, parvuli (0,5–1″ diam.), dein applanato-expansi, saepeque lineatim confluentes (3–10″ long. × 1–2″ lat.), matrice arcte adnati, coriacei, subcrassiusculi, rigiduli, ambitu strictiuscule liberi, reflexi (1-3‴), dense grosseque lobato-repandi, lobis contractulo-crispatis, obtusiusculis, extus testacei pruinulosi v. puberuli, hymenio plano v. spurie undulato tubercolatove, in juventute albo-pallescente, dein alutaceo (in senectute subfulvescenti-rufescente), carnoso-subceraceo, in sicco non v. vix hinc inde rimuloso.

Hab. Ad ramos dejectos putrescentes *Fagorum* in sylvis prope *Slogget bay*, Jun. 1882.

95. Corticium diaphanum Speg. (n. sp.)

Diag. Latissime effusum, mucoso-membranaceum, pellucidum, tenuissimum, matrice laxe adhaerens, margine subdeterminatum non reflexum, hymenio vix evoluto, pulverulento-ceraceo, facillime detersili donatum, in sicco cartilagineum, sordide rufescenti-testaceum, irregulariter hinc inde contracto-fissum.

Hab. Ad lignum mucidum decorticatum *Fagorum* in sylvis, in *Staten island*, Mart. 1882.

Obs. Species *Corticii gigantei* Fr. peraffinis, sed certe satis distincta.

96. Corticium incarnatum Fr.—Hym. eurp. p. 634.
var. *Antarcticum* Speg.

Diag. Tenuissimum, latissime incrustans, ceraceum, pallide aurantio-carneum, dense sed spurie rugulosum v. tuberculatum, in juventute albo-pruinulosum, in sicco minute laxeque rimulosum, matrici subinnatum, indeterminatum.

Hab. Ad ramos emortuos putrescentes *Berberidis ilicifoliae* prope *Pactolus bay* in *Staten island*, Mart. 1882.

97. Corticium iaganicum Speg. (n. sp.)

Diag. Alutaceum, crassiuscule membranaceum, late effusum, matrici totum adnatum, facile tamen corii instar separabile, molle, tenacellum, margine determinatum, repandum, saepe attenuato-evanescens, non reflexum, planum, laevissimum, in sicco non v. vix hinc inde minute rimulosum, atque ambitu corrugato-subreflexum. Sporae ellipticae v. ovatae (5-6 × 3-3,5 μ), hyalinae, laeves.

Hab. Ad ramos decorticatos putrescentes *Mayteni magellanicae* in insula *Aicina, Beagle channel*, Maj. 1882.

98. Corticium triviale Speg. (n. sp.)

Diag. Crassiuscule membranaceum, planum, late effusum, laxe matrici adnatum, laeve v. spurie tuberculato-undulatum, margine non v. vix attenuatum, determinatum sed non reflexum, repandulum, lobatum, subtus intusque album, supra (hymenio) carneum v. aurantium, in juventute subpruinulosum ac mucedineo-ceraceum, siccum tenacellum, rigidulum, non rimosum vix hinc inde v. ambitu contracto-lacerum ac reflexulum.

Hab. Ad ligna faginea decorticata putrescentia in sylvis in *Staten island* et prope *Negri fiord* sub *Monte Sarmiento*, Mart. et Maj. 1882.

Obs. Species vulgata, trivialis, summopere polymorpha, saepe formam *Sterei rugosi* Fr. depauperatam simulans, sterilis, hymenio cristallis minutissimis (15-20 μ diam.) oxalati calcici dense conspersa.

99. Corticium majusculum Speg. (n. sp.)

Diag. Coriaceo-membranaceum, primo suborbiculare, scutato-adnatum, centro umbonatulum, densiuscule gregarium, dein confluens, late effusum, matrice laxe

adnatum, margine repando-lobato, saepe reflexo, extus villosulo ligneo v. albo-fulvescente donatum, hymenio in vivo tenui, submucedineo, sordide albo, in sicco subevanescente, laevi non v. vix hinc inde scrupuloso, saepe obsoletissime denseque zonato, rimis majusculis labiis revolutis, sordide fusco ornatum.

Hab. Vulgatissimum ad ligna faginea putrescentia in sylvis in *Staten island* ac in *Fuegia* tota, hiem. et aest. 1882.

100. Corticium microscopicum Speg. (n. sp.)

Diag. Minutissimum (1-3‴ diam.), tenui membranaceum, coriacellum, rigidulum, subceraceum, cupulatum, scutato-adfixum, solitarium v. densiuscule gregarium saepeque confluens, margine libero acutiusculo integro reflexo extus fulvescente v. rufescente glaberrimo laevissimo, hymenio tenuissimo cinereo in prima aetate glauco-pruinuloso.

Hab. Ad ramos dejectos putrescentes *Fagi betuloidis* in sylvis prope *Iandagaia*, Maj. 1882.

Obs. Species *Calloriae epiporae* minutie et habitu simillima, a genere nonnihil desciscens; an melius Cyphella?

101. Corticium roridum Speg. (n. sp.)

Diag. Late effusum, ceraceo-incrustans, tenue, flavescenti-album v. alutaceum, margine attenuatum repandum, lobatum, zona fibrillosa ac fimbriatula, latiuscula pallescente v. alba cinctum, hymenio in juventute sulfureo-pruinuloso, guttulis acqueis sordidis minutis insperso, laevi, plano v. spurie ruguloso-tuberculoso donatum.

Hab. Ad corticem truncorum *Fagi antarcticae* in sylvis prope *Slogget bay*, Jun. 1882.

102. Corticium rufo-fulvum Mntgn. — Fr.-Epicr. p. 553.

Hab. Ad ramos dejectos putrescentes *Chiliotrichi amelloidis* prope *Port Cook* in *Staten island,* Mart. 1882.

Obs. Species pulchella, habitu et colore mox dignoscenda.

103. CORTICIUM STELLIGERUM Speg. (n. sp.)

Diag. Effusum, late incrustans, vegetum contiguum, margine attenuato-submembranaceum e carneo v. cinereo-fuscescens, centro crassiusculum pruinuloso-velutinum, rufescens v. ferrugineum dense minutissimeque setulosum, setulis fuligineis, rigidulis, continuis, apice plus minusve radiato-ramulosis, ramis (20-30 $\times$ 3 μ), apice acutiusculis.

Hab. Ad ligna putrescentia decorticata faginea in *Staten island* prope *Port Vancouver,* Mart. 1882.

CLAVARIEAE Fr.

104. CLAVARIA PATAGONICA Speg. — Fung. pat. n. 53.

Hab. In pratis collinis sub arbustis prope *Ushuvaia,* Maj. 1882.

Obs. Specimina ushuvaiensia graciliora, magis elongata ac nonnihil viscidula.

105. CLAVARIA DELICATA Fr. — Hym. eurp. p. 670.

Hab. Ad truncos dejectos fagineos putrescentes in sylvis prope *Hope harbour,* Maj. 1882.

Obs. Forma fuegiana minuta, candida, vix ramorum apicibus fuscescentibus, acutis, deorsum subglabrata.

106. CLAVARIA? FUEGIANA Speg. (n. sp.)

Diag. Syncoryne; clavulae e rimis corticis erumpentes, 3-5-aggregatae, minutae, flavae, sursum obovato-spathulatae (1-2''' diam.), apice obtusae non v. vix repandulae, undulato-rugosae, deorsum cuneato-attenuatae ac in stipite plus minusve evoluto (4–6''' long. $\times$ 0,4-

0,5''' crass.) productae, glaberrimae, laevissimae; sporae cylindraceae v. suballantoideae, minutae (2,5-4 × 1-1,5 μ), utrinque obtuse rotundatae v. subtruncatae, hyalinae.

Hab. Vulgata ad ramos dejectos putrescentes fagorum in *Fuegia* tota, Maj. et Jun. 1882.

107. Calocera cornea Batsch. — Speg., Fung. pat. n. 54.
Hab. Vulgaris in truncis putrescentibus prope *Ushuvaia* et *Slogget bay*, Maj. et Jun. 1882.

108. Typhula candida Fr. — Hym. eurp. p. 685.
Hab. Ad folia dejecta putrescentia *Escalloniae serratae* prope *Penguin rookery* in *Staten island*, Mart. 1882.

TREMELLINEAE Fr.

109. Tremella lutescens Pers. — Speg., Fung. pat. n. 55.
Hab. Ad ramos dejectos putrescentes *Fagi betuloidis* prope *Port S. John* in *Staten island*, Mart. 1882.

110. Tremella mesenterica Retz. — Fr., Hym. eurp. p. 691.
Hab. Vulgatissima ad ramos dejectos putrescentes fagorum in *Fuegia* tota, aest. et hiem. 1882.

111. Tremella sordida Speg. (n. sp.)
Diag. Crustacea; effusa, applanata, saepe plus minusve laxe spurie granulosa, matrici arcte adglutinata, subceraceo-mucosa, viscosa, indeterminata, late ambiens, sordide albescens, in sicco submembranacea, rigida contracta, rimosa, sordide fusco-rufescens.
Hab. Ad ramos putrescentes mucidos in *Staten island* et prope *Ushuvaia*, aest. et hiem. 1882.
Obs. Species polymorpha sordida, nunc genere *Corticio*

nunc genere *Exidia* accedens, melius tamen inter *Tremellas* adscribenda.

112. EXIDIA GLANDULOSA Bull. — Fr., Hym. eurp. p. 694.
Hab. Non rara ad ramos vivos v. emortuos *Chiliotrichi amelloidis* prope *Port Cook* in *Staten island*, Mart. 1882.

113. HIRNEOLA ANTARCTICA Speg. — Fung. pat. n. 57.
Hab. Ad truncos emortuos fagineos in *Staten island* et in *Fuegia tota*, aest. et hiem. 1882.

114. HIRNEOLA VITELLINA Lév. — Speg., Fung. pat. n. 58.
Hab. Vulgata in *Staten island* et in *Fuegia* tota ad truncos fagineos, aest. et hiem. 1882.
Obs. Incolae illam comedunt et *allush* vocant.

115. DACRYMYCES DELIQUESCENS Fr. — Hym. eurp. p. 698.
Hab. Ad palos tuguriorum in *Picton island*, in *Ushuvaia* et in *Gertrude cove*, Mart. et Jun. 1882.

116. DACRYMYCES PROPOLOIDES Speg. (n. sp.)
Diag. Laxe gregarius, innato-erumpens, irregulariter orbiculari-ellipticus v. hysterioideus, in vivo subgelatinosus, tumidulus, succineus, in sicco depressus, margine acutiusculus, reflexulus, integer v. sublobatus, sordide fusco-olivaceus; conidia catenulata, globosa ($2 \times 2\ \mu$), hyalina ; sporae non visae.
Hab. Ad palos vetustos putrescentes fluitatos prope *Slogget bay*, Jun. 1882.
Obs. Species pulchella *Propolidibus* habitu simillima.

117. DACRYMYCES STILLATUS Nees.—Fr., Hym. eurp. p. 699.
Hab. Ad truncos decorticatos putrescentes prope *Ushuvaia*, Maj. 1882.

118. Exobasidium antarcticum Speg. — Fung. pat. n. 59.
Hab. Vulgatissimum ad apicem ramulorum folia ac inflorescentias *Lebethanti americani* infestans in *Staten island* et in *Fuegia* tota aest. et hiem. 1882.

GASTEROMYCETEAE (Fr.) DBy.

119. Sphaerobolus stellatus Tode — Speg., Fung. pat. n. 60.
Hab. Ad tigilla faginea dejecta putrescentia prope *Ushuvaia*, Maj. 1882.

120. Nidularia australis Tul. — Mntgn., in Gay. Fl. Chil. vol. VII, p. 502.
Hab. Ad frustula lignea putrescentia in sylvis prope *Penguin rookery* in *Staten island*, Febr. 1882.

121. Bovista antarctica Speg. — Fung. pat. n. 71.
Hab. Ad terram in graminosis prope *Iandagaia*, Maj. 1882.
Obs. Specimen fuegianum vere obsoletum, duplo majus, ad radicem crassam (2″ long. × 2″ diam.) terra infossam ac adglutinatam, sublignosam, apice subcupulato-expansam (an basis sterilis rudimentum?) reductum.

122. Bovista magellanica Speg. — Fung. pat. n. 68.
Hab. Vulgata in graminosis apricis prope *Ushuvaia* Maj. 1882.
Obs. Sporae globosae (4-5 μ diam.), papillis non v. vix manifestis, cauda praelonga (10-15 × 1 μ) recta ornatae, pallide olivaceae. Incolae cum illa fomitem parant ac *bácan* (siccum) vocant.

123. Bovista pachydermatica Speg. — Fung. pat. n. 72.
Hab. Vulgata in collinis prope *Ushuvaia* et *Slogget bay,* Maj. et Jun. 1882.

PHYCOMYCETEAE DBy.

124. Peronospora alsinearum Casp.

Hab. Ad folia viva *Cerastii arvensis?* in herbosis prope *Ushuvaia*, Maj. 1882.

Obs. Specimina summopere depauperata ac senescentia sed certe hanc speciem sistentia.

125. Mucor mucedo Linn.

Hab. In stercore adhuc udo *Lutrae felinae* in scopulosis prope *Port Vancouver* in *Staten island*, Mart. 1882.

126. Pilobolus crystallinus Tode — Speg., Fung. pat. n. 102.

Hab. Vulgatus in fimo vaccino subputrescente in prope *Ushuvaia*, Maj. et Jun. 1882.

HYPODERMEAE DBy.

127. Ustilago bromivora F. v. W. — Speg., Fung. pat. n. 102.

Hab. In paniculis nondum evolutis *Bromi macranthi* prope *Punta anegada*, Jul. et *Bromi unioloidis* prope *Ushuvaia*, Maj. 1882.

Obs. Sporae globosae v. e mutua pressione obtuse angulosae intus granulosae (an extus minutissime papillulosae?), opace fuligineae (8-12 $\times$ 7-8 μ), primo compactae dein pulverulentae.

128. Ustilago carphae Speg. (n. sp.)

Diag. Sori ovaria tantum implectentes ac ea globose turgentes, mox denudati, compactiusculi, friabiles, aterrimi; sporae globosae e mutua pressione obtuse angulatae (18-20 μ diam.), laevissimae, opace atro-fuligineae, nucleo subpellucido donatae.

Hab. Ad spicas juveniles *Carphae schoenoidis* prope *Port Cook* in alpinis *Staten island,* Mart. 1882.

129. Sorosporium antarcticum Speg. (n. sp.)

Diag. Sori inflorescentias nec non folia juvenilia infectantes eaque turgentes, primo compacti, duriusculi, per aetatem mucoso diffluentes, aterrimi; sporae globosae e mutua pressione obtuse angulosae (12-18 μ diam.), subopace fuligineae, laeves v. vix subrugulosae, in glomerulis (20-25 cellularibus) magnitudine ludentibus congestae.

Hab. Ad folia viva *Azorellae (bolacis) glebariae* in scopulosis circa *Port Vancouver* in *Staten island,* Mart. 1882.

130. Puccinia stellariae Dub. — Bot. gall. II, p. 887.

Hab. Ad folia viva *Cerastii* v. *Stellariae* cujusdam in umbrosis prope *Shammacus,* Maj. 1882.

Obs. Teleutosporae elliptico-clavulatae (38–40 × 15–18 μ), apice obtuse rotundatae v. saepe subtruncatae, medio constrictae, tenuiter tunicatae, laeves, pallide fulvae, pedicello longiusculo (30-50 × 5 μ) e hyalino fulvescente suffultae.

131. Puccinia compositarum Schlchtd. — Speg., Fung. pat. n. 84.

Hab. Ad folia viva *Clarioneae magellanicae* et *Asteris Wahlii* in alpinis *M. Buenos-Aires* ac *M. Richardsohn* in *Staten island,* Mart. 1882.

Obs. Glomeruli teleutosporici uredosporicis conmixti. Teleutosporae tenui tunicatae, laeves, fuligineae (40-45 × 20-25 μ); uredosporae globosae, papillulosae, fulvescentes (24-28 μ).

132. Puccinia antarctica Speg. (n. sp.)

Diag. Sori hypophylli dense gregarii saepeque confluentes, mediocres (0,3-0,5‴ diam.), discoidei, compactiu-

sculi, pulvinatuli, atro-fuliginei; teleutospore ellipticae v. vix subclavulatae, tenuissime tunicatae, laevissimae, antice saepius rotundatae v. obtusissime subacutatae, medio parce constrictae, postice rotundatae v. vix attenuatae (50-55 × 25-30 μ), saturate cinnamomeae, pedicello mediocri, crassiusculo (40-50 × 5 μ), hyalino suffultae.

Hab. Ad folia viva *Berberidis dulcis* in scopulosis in *New year island*, Mart. 1882.

Obs. Specimina, quae sub nomine *P. berberidis* Mntgn. (Fung. arg. pug. IV, n. 59) edidi, longe abhorrent a typo nunc descripto; dubius tamen sum si haec species v. cordubensis typum montagnianum sistat.

133. Puccinia luzulae Lib.

Hab. Ad folia viva *Luzulae alopecuroidis* in pratis prope *Ushuvaia*, Maj. 1882.

Obs. Sori hypophylli, minuti, laxe gregarii, cinnamomei; teleutosporae clavulatae, apice truncate v. obtusissime rotundatae, crassissimeque tunicatae, medio non v. vix subconstrictae, postice attenuatae (40-50 × 20 μ), pallide fuligineae; stipes mediocris e hyalino fuscidulus (30-40 × 5 μ); uredosporae teleutosporis inmixtae e globoso ovoideae (25 μ diam.), laeves, fulvescentes. An varietas?.

134. Puccinia violae (Schm.) Wntr.

Hab. Ad folia viva *Violae magellanicae* in dumetosis prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Sori plus minusve dense gregarii, saepius hypophylli, maculis pallescentibus insidentes, parvuli, mox erumpenti-subpulveracei, saturate cinnamomei; teleutosporae subclavulatae, modice tunicatae (25-30 × 20 μ), loculo supero breviore crassioreque, apice saepius apiculato-umbonato, basi parcissime constrictae, loculo

infero graciliore longioreque, basi truncato ac abrupte in pedicello hyalino (25-30 × 5 μ) producto. In iisdem glomerulis teleutosporiferis adsunt uredosporae globosae (22-24 μ diam.), minute laxeque papilluloso-asperulae crassiuscule tunicatae, ut teleutosporae, pallide fulvescentes v. subcinnamomeae.

135. Puccinia rosthkoviae Speg. (n. sp.)

Diag. Sori macula fuscescente ac pallescenti-areolata insidentes, culmos saepe totos ambientes, longitudinales v. transversi saepeque confluentes, diu epidermide coriacella atque crassiuscula hinc inde frustulatim eroso-evanescente tecti, vix prominuli, pallidissime fulvescentes, magnitudine ludentes; teleutosporae ellipticae v. ovato-subclavulatae (30-35 × 16-20 μ) antice rotundatae v. obtuse acutatae, modice tunicatae, medio parce constrictae, inferne subcoarctato-truncatae abrupteque in pedicello hyalino mediocri (40 × 5 μ) productae, laevissimae, pallide fulvescentes, paraphysibus filiformibus aequilongis hyalinis eseptatis parce obvallatae.

Hab. Ad culmos vivo *Rosthkoviae grandiflorae* in pratis uliginosis sub *Richardsohn mount* in *Staten island,* Mart. 1882.

Obs. Species pulchella distinctissima sed difficillime conspicienda v. rarissima.

136. Uromyces armeriae Lév. — Speg., Fung. pat. n. 91.

Hab. Ad folia viva *Armeriae andinae* prope *Port S. John* in *Staten island,* Mart. 1882.

137. Uromyces fuegianus Speg. (n. sp.)

Diag. Sori epiphylli, lineares, majusculi (2-5‴ long. × 0,3-0,5‴ crass.), planiusculi, paralleli, primo tecti sed mox erumpenti-subsuperficiales, saturate fuliginei; teleutosporae versiformes saepius obovatae v. lanceolatae,

antice obtuse (saepeque latae ac subtruncatae) rotundatae (35-40 × 30-35 μ), non v. 1-guttulatae, superne modice incrassato-tunicatae laevissimae, intense cinnamomeae, stipite longiusculo subfulvescente (50-80 μ long. × 5-7 μ crass.) suffultae, densissime constipatae, aparaphysatae.

Hab. Ad folia viva *Festucae purpurascentis* in *Staten island* nec non per *Fuegia tota*, aest. et vere 1882.

Obs. Species certe *U. cuspidato* Wintr. (Pilz. v. C. Horn. n. 1) peraffinis nisi identicus, nunquam tamen teleutosporis apice cuspidatis, et tamen ab eo recedens.

138. Uromyces Pratiae Speg. (n. sp.)

Diag. Sori sparsi, ramulicoli v. foliicoli atque amphigeni, minuti (0.3-0.5‴ diam.), irregulariter discoideo-angulosi, maculis carentes, diu epidermide tecti, pulverulenti, atro-fuliginei; teleutosporae ex elliptico globosae (30-35 × 22-25 μ), tunica modice incrassata donati, apice umbone crasso, subtruncato-umbilicato majusculo ornatae, inferne pedicello hyalino mox diffuente (5 μ), ut videtur, breviusculo suffultae, laevissimae, obscure cinnamomeae, aparaphysatae.

Hab. Ad folia viva *Pratiae repentis* rarissime in *Staten island*, Mart. 1882.

139. Uromyces orobi (Pers.) Wint.

b. *Viciae.*

Hab. Ad folia viva *Viciae magellanicae* prope *Ushuvaia*, Maj. 1882.

Obs. Teleutosporae globoso-ovatae (24-28 × 20-22 μ), sursum obtuse acutatae, tenuiter tunicatae, laeves, grosse 1-guttulatae, fuligineae, stipite hyalino, longiusculo (20-25 × 3-5 μ) suffultae.

140. Uromyces magellanicus Speg. — Fung. pat. n. 88.

Hab. In foliis vivis *Caricis* speciei cujusdam prope *Fiord Negri* sub *Monte Sarmiento,* Maj. 1882.

141. Uredo antarctica Speg. (n. sp.)

Diag. Maculae nullae v. minutissimae, amphigenae, fuscescentes, indeterminatae; acervuli hypophylli, plus minusve laxe gregarii, minuti (0,3-0,5‴ diam.), diu epidermide tecti, fulvescentes, per aetatem decidui ac folium perforatum relinquentes; uredosporae globosae v. ovoideae, saepe e mutua pressione angulosae (20-24 × 18-20 μ), tenui tunicatae, granuloso farctae, minutissime subimperspicueque papillulosae (?) hyalinae.

Hab. Ad folia primaria (nunquam in cotyledonibus) *Berberidis* cujusdam prope *Ushuvaia*, Maj. 1882.

142. Uredo junci Str.

Hab. Ad culmos languidos *Junci* cujusdam in uliginosis prope *Punta anegada* in *Freto magellanico,* Jun. 1882.

Obs. Sporae globosae (22-25 μ diam.), pallide fulvescentes, modice tunicatae, laxe majusculeque asperulae.

143. Uredo? aecidiiformis Speg. (n. sp.)

Diag. Sori hypophylli, mellei, hinc inde 3-8-aggregati, macula pallescenti fusco-marginata (2-8‴ diam.) insidentes parvuli, conoidei (0,3-0,5‴ diam.), parenchymate innati, apice discoideo-aperti, pulvinatuli, subconfluentes, pseudoperidio nullo; uredosporae ovato-elongatae v. subclavulatae, antice acutatae v. rotundatae rarius truncatae, postice attenuatae acutato-obtusatae (50-60 × 20 μ), episporio crassiusculo, minute denseque ruguloso donatae, e hyalino pallidissime subfulvescentes.

Hab. Ad folia viva *Berberidis ilicifoliae* in sylvis prope *Penguin rookery* in *Staten island,* Mart. 1882.

Obs. In senectute folia perforata evadunt ob caducitatem

macularum fungilliferarum. An huc *Aec. magellanicum* Berk. ducedum?

144. Aecidium berberidis Gml. — Speg., Fung. pat. n. 97.
Hab. Ad ramulos, inflorescentias nec non folia *Berberidis heterophyllae* prope *Punta anegada* in *Freto magellanico*, Apr. et Jun. 1882.
Obs. Species vulgatissima sed semper senescentia et tandem valde dubia!

145. Aecidium hualtatinum Speg. (n. sp.)
Diag. Pseudosporangia dense 20-30-gregaria, glomerulos discoideos (3-8‴ diam.) macula majuscula pallescente indeterminata insidentes, hypophylla, flavidula, modice prominula, cylindracea, ore pallescenti-laciniato donata; contextus e cellulis rhomboideo-tetragonis, non v. vix loricatis, obtusissime angulatis, crasse tunicatis, dense rugoso-striatis (50-60 × 25-30 μ), subhyalinis compositus; sporae globosae (26-34 μ diam.), e mutua pressione angulosae, crasse tunicatae, dense minutissimeque ruguloso-granulosae, pallide flavescentes, granuloso-farctae.
Hab. Ad folia viva *Senecionis* (*hualtatae*) spec. in uliginosis in *Gabel island*, Maj. 1882.
Obs. Huc etiam *Aec. senecionis* Speg. (non Desm.) in Fung. arg. pug. I, n. 53 ducendum! Ab *Aecid. senecionis* Dsm. toto coelo diversum, nec quoque comparandum.

146. Aecidium violarum Lk.
Hab. Ad folia viva *Violae magellanicae* in dumetosis marittimis prope *Port Cook* in *Staten island*, Mart. 1882.
Obs. Pseudosporangia hypophylla v. petiolicola, dense aggregata; cellulae contextus polygonae (25-30 μ diam.),

subhyalinae, minute denseque verruculosae, crasse tunicatae; sporae globosae e mutua pressione angulosae (10-20 × 15-18 μ), subhyalinae modice tunicatae, laeves.

147. Aecidium pratiae Speg. (n. sp.)
Diag. Maculae nullae v. folium totum nonnihil pallescens ac incrassatum; pseudosporangia primo globosa dein scutellato-aperta (0,3-0,5‴ diam.) vix prominula flavescenti mellea, ore non v. vix exerto parcissime fisso v. laciniato, contextu e cellulis polygonis (40-45 × 20-30 μ) non v. vix loricatis, crasse tunicatis, dense verrucosis composito donata, laxe gregaria; sporae globosae v. e mutua pressione angulosae (20-25 × 17-20 μ), tenui tunicatae, laeves, granuloso-farctae, flavescentes.
Hab. Ad folia viva *Pratiae repentis* in herbosis prope *Penguin rookery* in *Staten island,* Mart. 1882.

PYRENOMYCETEAE Fr.

PERISPORIACEAE Fr.

148. Phyllactinia antarctica Speg. — Fung. pat. n. 111.
Hab. Ad folia arida adhuc pendula *Ribis magellanicae* in dumetis prope *Shammacus*, *Beagle channel,* Maj. 1882.

149. Eurotium herbariorum Lnk.
Hab. Ad folia dijecta putrescentia *Embothrii, Mayteni,* etc. coacervata in insula *Aicina*, *Beagle channel,* Maj. 1882.

150. Eurotium chilense Mntgn. — Gay, Fl. Chil. Bot. vol. VII, p. 475.

Hab. Ad corticem ramulorum putrescentium *Fagi betuloidis* in tuguriis incolarum prope *Agaia*, Jun. 1882.

Obs. Perithecia dense gregaria, subiculo gossypino laxo fulvello v. ferrugineo insidentia, globosa (100-110 μ diam.), flava, glabra, laevia, tenuissime membranacea, contextu e cellulis majusculis (12-15 μ diam.) composito, hyalino-flavescente donata; asci globosi (18-20 μ diam.), mox diffluentes, octospori; sporida globosa v. ovoidea (7-8 × 6-8 μ) punctato-areolata, hyalina.

SPHAERIACEAE Fr.

151. Calosphaeria antarctica Speg. (n. sp.)

Diag. Erostella; sori dense sparsi v. subgregarii, inordinati, plerumque minuti (1-2‴ diam.), suborbiculares v. elliptici, peridermio parum pustulato, elevato tecti, transverse erumpentes; perithecia in singulo soro 3-8, plus minusve dense stipata, circinata, decumbentia, minuta (150-180 μ diam.), globosa, atra, glabra, non v. vix collabescentia, coriacella, contextu indistincto, ostiolis minutis cylindricis convergentibus donata; asci minuti, subclavati, apice abrupte truncato-rotundati crasseque tunicati, basi breviter attenuato-obtusati (20–22 × 2–3 μ), octospori, stipitibus simplicibus (25-30 × 1,5 μ), sursum subincrassatulis subnodulosis v. subtruncatis 2-(rarius 3–) ascoforis suffulti, paraphysibus crassiusculis, valde longioribus (70-90 × 2 μ), parce obvallati; sporidia disticha oblongo-cylindracea, utrinque obtusiuscula ac minute 1-guttulata (3-4 × 0,8-1 μ), parum curvata hyalina.

Hab. Ad ramos dejectos *Fagi betuloidis* in *Staten island* et per *Fuegiam* totam, aest. et hiem. 1882.

152. Valsa ribesia Karst.— Sacc., Syll. I, p. 117.

Hab. In ramis dejectis putrescentibus *Ribis magellanicae* in *Iandagaia, Beagle channel,* Maj. 1882.

Obs. Asci nonnihil majores (45-50 × 5 μ); sporidia botuliformia (9–10 × 1,5 μ), hyalina.

153. Eutypa peraffinis Speg. (n. sp.)

Diag. Stromata per ramos corticatos late ambientia, nigra, lignum plus minusve atro-inquinantia; perithecia stromate immersa, dense aggregata, acervulos difformes, pulvinatulos, saepius hinc inde seriatim erumpentes efformantia, sphaerica, mediocria (300-350 μ diam.), glabra, atra, coriacea, in ostiolo brevissimo, crasso, rugoso, irregulari, vix exerto producta; asci clavati, apice attenuato–cuneati ac truncati crassissimeque tunicati, 1-foveolati, postice attenuati ac in pedicello praelongo producti (pr. sp. 40-45 × 6 μ — ped. 40-80 × 2 μ), octospori, aparaphysati; sporidia mono-v. di-sticha, allantoidea (10-15 μ × 2-3 μ), utrinque obtuse rotundata ac 1-guttulata, chlorina.

Hab. In ramis emortuis putrescentibus *Berberidis ilicifoliae* in *Pactolus bay, Staten island,* Mart. 1882.

154. Eutypa patagonica Speg. — Fung. pat. n. 115.

Hab. In ramis dejectis *Chiliotrichi amelloidis* vulgatissima in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

155. Physalospora cymbisperma Speg. (n. sp.)

Diag. Perithecia cortice nidulantia, peridermio tecta, densiuscule gregaria, e globoso depressa (300-350 μ diam.), atra, glabra, laevia, non v. vix papillulato–ostiolata, coriacella, contextu in juventute subpellucido parenchymatico, dein opaco indistincto; asci cylindracei apice subtruncato-rotundati crassiusculeque tunicati, bifoveolati, basi modice attenuato-stipitati (120-130

$\times$ 6-7 μ), octospori, paraphysibus filiformibus septulatis obvallati; sporidia recte monosticha, elliptico-cymbiformia, utrinque acutiuscule rotundata (12–14 $\times$ 5 μ), primo granuloso-farcta dein grosse 1-guttulata, hyalina.

Hab. Ad corticem ramorum *Fagi betuloidis* in *Staten island*, Mart. 1882.

156. Physalospora magellanica Speg. (n. sp.)

Diag. Perithecia hinc inde dense gregaria, macula parvula arescenti-cinerea (2-3‴ diam.) insidentia, corticе nidulantia, peridermio velata, globulosa (150-180 μ diam.), glabra, atra, coriacella, ostiolo latiusculo vix papillulato, non v. vix exerto donata, contextu subindistincto, olivaceo; asci cylindracei, apice rotundati, basi abruptiuscule contracti ac pedicello brevissimo crassiusculo suffulti (60 $\times$ 17 μ), octospori, paraphysibus filiformibus parcis obvallati; sporidia oblique monosticha, elliptica, utrinque acutiuscule rotundata (14-15 $\times$ 6-6,5 μ), hyalina.

Hab. Ad culmos languidos *Junci* cujusdam in *Punta anegada, Freto magellanico*, Jun. 1882.

157. Botryosphaeria berengeriana DNtrs.—Sacc., Syll. I, p. 457.

Hab. In ramulis dejectis putrescentibus *Mayteni* in sylvis in *Gabel island, Beagle channel*, Jun. 1882.

Obs. Asci subsaccati (80-90 $\times$ 16-18 μ), parce paraphysati; sporidia elliptico-subbiconica utrinque obtusiuscula (20-22 $\times$ 10 μ), hyalina.

158. Ceratostoma arcuatirostre Speg. (n. sp.)

Diag. Perithecia sparsa v. laxe gregaria, superficialia v. semiimmersa, globulosa (250-300 μ diam.), atra, glabra, carbonacea, opaca, ostiolo erecto v. decumbente, lon–

gissimo tenuissimo (750-1000 × 30-50 μ) acuto fragili laevissimo arcuato ornata; asci mox diffluentes, cylindracei?; sporae globosae v. sublimoniformes, magnitudine ludentes (10-15 × 6-10 μ — saepius 12 × 8 μ), fuligineae, utrinque apiculo minutissimo vix perspicuo hyalino auctae.

Hab. In fragmentis ligneis putrescentibus prope *Ushuvaia*, Maj. 1882.

159. Chaetomium pannosum Walr. — Sacc., Syll. I, p. 221.

Hab. In foliis caulibusque putrescentibus *Brassicae napi* prope *Ushuvaia*, Maj. 1882.

160. Sordaria pseudominuta Speg. (n. sp.)

Diag. Perithecia sparsa, semiimmersa e globoso pyriformia (250-300 μ diam.), obtuse minuteque ostiolata, atra glabra crassiuscule membranacea, contextu parenchymatico fuligineo donata; asci mox diffluentes, octospori; sporidia fuliginea oblique monosticha, elliptica, non v. vix sublimoniformia (25-28 × 12-14 μ), caudis, altera apicali involuta globulum (6 μ diam.) simulante, altera basali recta cylindracea (12-18 × 4 μ), hyalinis ornata.

Hab. In fimo vaccino in herbosis prope *Ushuvaia*, Maj. 1882.

Obs. Species *S. minuta* Fuck. peraffinis, perithecii, glabris, sporidiis majoribus satis recedens.

161. Sordaria hypocoproides Speg. (n. sp.)

Diag. Perithecia e globoso pyriformia (450-500 μ diam.), immersa, ostiolo crasso obtuso non v. vix exerto donata, glabra, atra, crassiuscule membranacea, coriacella, contextu indistincto; asci cylindracei apice rotundato-truncati, crasse tunicati, 3-foveolati, basi in pedicello breviusculo attenuati (160-200 × 20 μ), octospori,

paraphysibus filiformibus, guttulatis crassiusculis parce obvallati; sporidia recte v. suboblique monosticha, elliptica v. inaequilateralia subcymbiformia (28-32 × 12-13 μ), utrinque obtuse rotundata, basi apiculo globoso, minutissimo vix perspicuo hyalino aucta, opace fuliginea.

Hab. Ad fimum vaccinum putrescentem in herbosis prope *Ushuvaia* et in *Gabel island*, Maj. 1882.

162. Hypocopra humana Fuck. — Sacc., Syll. I, p. 240.

Hab. In stercore humano subputrescente in sylvis prope *Gertrude cove*, Jun. 1882.

163. Hypocopra aviaria Karst. — Sacc., Syll. I, p. 242.

Hab. In stercore *Tachyeres* (*anatis*) *cinerei* in scopulosis prope *Wallamâtu*, *Beagle channel*, Maj. 1882.

Obs. Asci cylindracei, apice truncati, crasse tunicati bifoveolati, basi breviter pedicellati, aparaphysati (80-90 × 10-12 μ); sporidia recte v. suboblique monosticha, elliptica, utrinque obtusa (14-15 × 10 μ), nonnihil compressa (6 μ crass.) fuliginea, in prima aetate strato mucoso hyalino tenui obovoluta. An species distincta?.

164. Hypocopra darwinii Speg. — Fung. pat. n. 118.

Hab. In fimo equino vetusto exsiccato prope *Ushuvaia*, Maj. 1882.

Obs. Asci cylindracei (p. sp. 75-80 × 12-13 μ), crasse breveque pedicellati (ped. 20 × 5-10 μ), densiuscule paraphysati; sporidia recte v. oblique monosticha, elliptico subdiscoidea (9-12 × 9-10 μ), e latere compressiuscula (5-6 μ crass.), opace fuliginea.

165. Hypocopra pilosella Speg. (n. sp.)

Diag. Perithecia subsuperficialia e globoso subpyriformia (180-200 μ), non v. parce umbonato-ostiolata, atra, praecipue circa ostiolum laxe puberulo-hispida, pilis

unicellularibus acutis simplicibus subcylindraceis (20-40 × 2-3 μ) opace fuligineis, coriaceo-membranacea, contextu subopaco atro parenchymatico donata; asci cylindracei, apice brevissime attenuati, truncato-rotundati, bifoveolati, basi abrupte minuteque coarctato-pedicellati (80–95 × 7-8 μ), octospori, paraphysibus filiformibus densiusculis obvallati; sporidia oblique disticha, elliptica, utrinque late rotundata (9-10 × 6-7 μ), e latere compressa (4-5 μ crass.), opace fuliginea, muco destituta.

Hab. In fimo equino vetusto putrescente prope *Ushuvaia*, Maj. 1882.

166. Hypocopra? parvicaudata Speg. (n. sp.)

Diag. Perithecia innato-erumpentia, solitaria v. pauci-aggregata, ovato-pyriformia, majuscula (1‴ diam.), grosse umbonato-ostiolata, atra, crasse membranacea, contextu opaco indistincto fuligineo subiculo olivaceo ex hyphis gracilibus (3-4 μ crass.) dense intricato-ramosis, parce septulatis, laxe insidenti-vestita; asci cylindracei majusculi (350-400 × 30 μ), apice subattenuati crasseque tunicati leniter bifoveolati, basi longiuscule attenuato-pedicellati, aparaphysati, octospori; sporidia oblique monosticha, elliptica (45–50 × 25 μ), opace fuliginea, utrinque obtusa, basi apiculo e globoso-conico (5 × 5 μ), hyalino aucta, strato mucoso hyalino crassissimo (5–8 μ crass.) obovoluta.

Hab. In fimo equino putrescente rarissime prope *Ushuvaia*, Maj. 1882.

Obs. Species praedistincta nunc *Sordariae* generi nunc *Hypocoprae* pertinens, et tantum vere ambigua.

167. Coprolepa merdaria (Fr.) Fuck. — Sacc., Syll. I, p. 248.

Hab. Non rara in fimo *Equi* et *Aucheniae* prope *Ushu-*

vaia, Slogget bay et *Gertrude cove,* Maj. et Jun. 1882.

Obs. Stroma peritheciorum late effusum extus nigrum intus album; perithecia saepe hinc inde dense gregaria, majuscula (400-800 μ); asci mox diffluentes (22 μ crss.), octospori paraphysati; sporidia monosticha, elliptica, non v. vix subinaequilateralia (28-35 × 14-16 μ) utrinque obtusa opace fuliginea strato mucoso hyalino crasso obovolata.

168. Coprolepa antarctica Speg. (n. sp.)

Diag. Stromata saepius parvula orbicularia (1-2‴ diam.), indeterminata, laxe gregaria v. saepe plus minusve confluentia, extus ligneo-pallescentia, coriacella, compactiuscula laevia, centro ostiolo crasso non v. vix prominulo, nigricante perforata, intus alba, furfuracea; perithecia saepius solitaria, rarius 3-4-aggregata, immersa globosa majuscula (500-700 μ diam.) tenui membranacea mollia fuliginea, contextu densissime ac subindistincte parenchymatico olivaceo, ostiolo crasso brevissimo obtuso coronata; asci cylindracei, antice truncato-rotundati, crassiuscule tunicati, postice in pedicello breviusculo attenuati (140-150 × 14-15 μ), octospori, paraphysibus paucis filiformibus saepius inmixti; sporidia monosticha, elliptica, leniter inaequilateralia, utrinque obtusa (20-25 × 9-10 μ), grosse 1-areolato-nucleata, strato hyalino mucoso crasso obovoluta.

Hab. Vulgatissima in fimo *Aucheniae guanaci* et *Berniclae antarcticae* per *Fuegiam* totam, hiem. 1882.

169. Coprolepa equorum Fuck. — Sacc., Syll. I, p. 249.

Hab. In fimo ovino vetusto putrescente in pratis prope *Ushuvaia,* Jun. 1882.

Obs. Species praecedenti peraffinis, stromate tamen nigro facillime dignoscenda; saepe tamen cum forma sene-

scente *C. antarcticae Speg.*, stromate e sporis exilientibus late nigrificato confunditur.

170. Rosellinia lignaria (Grév.) Nitzk. — Sacc., Syll. I, p. 269.
Hab. Ad rimas ramorum viventium *Fagi betuloidis* in *Agaia, Beagle channel*, Jun. 1882.
Obs. A typo nonnihil recedere videtur; perithecia parvula globosa, depressula (150-180 μ), laxe gregaria, pilis 1-cellularibus (15-25 × 3-5 μ) fuligineis parce vestita; sporidia elliptico-ovata, non v. vix inaequilateralia, utrinque acutiuscule rotundata (13-15 × 6-7 μ), opace fuliginea.

171. Rosellinia magellanica Speg. — Fung. pat. n. 122.
Hab. Ad ramos decorticatos rimosos *Fagorum* prope *Ushuvaia*, Maj. 1882.
Obs. Sporidia nonnihil majora (20-22 × 14 μ), e latere pro ratione magis compressa (5-6 μ crass.); iodi ope nulla.

172. Rosellinia sordaria (Fr.) Rhm.—Sacc., Syll. I, p. 270.
Hab. In ligno fagineo putrescente mucido prope *Penguin rookery* in *Staten island*, Febr. 1882.
Obs. Perithecia globulosa (200-250 μ), subsparsa, pilis 1-cellularibus (20-30 × 3 μ) densiuscule vestita; asci cylindracei, apice truncati, basi longiuscule attenuato-pedicellati (90-110 × 7-8 μ) paraphysati; sporidia monosticha, elliptico-ovoidea, utrinque latissime rotundata (7-9 × 4-5 μ), e latere subcompressa v. inaequilateralia, primo grosse 1-2-guttulata subhyalina, dein opace fuliginea.

173. Rosellinia subcorticalis Fuck. — Sacc., Syll. I, p. 272.

Hab. Ad corticem duriorem putrescentem *Fagi* sp. prope *Ushuvaia*, Maj. 1882.

Obs. A typo nonnihil recedit, an species distincta?. Perithecia hinc inde dense aggregata, e globoso conoidea (150-200 μ), atra, laxe puberula, pilis minutissimis (10-15 × 2 μ), 1-cellularibus, obtusis opace fuligineis; sporidia elliptico-ovata utrinque obtuse rotundata (6-7,5 × 5-6 μ), opace fuliginea.

174. Anthostomella cymbisperma Wintr. — Pilz. v. C. Horn, n. 7.

Hab. Vulgatissima in foliis emortuis graminacearum majorum in *Staten island* et per *Fuegiam* totam, aest. et hiem. 1882.

Obs. Asci apice truncati, crasse tunicati, bifoveolati; sporidia fuliginea, utrinque appendiculata (appendice supera minore), non vere cymbiformia, in vivo elliptico-ovoidea, diguttulata, in sicco mox contracta, inaequilateralia v. per aetatem dimidiato-scutellata, magnitudine nonnihil variabilia. Formae 2 distinctae adsunt: *a*) sporidiis muco destitutis, appendice supera non v. vix conspicua; *b*) sporidiis muco obovolutis, appendice supera infera fere aequante.

175. Anthostomella fuegiana Speg. (n. sp.)

Diag. Maculae pallescentes, indeterminatae; perithecia solitaria, sparsa v. hinc inde 2-3-subgregaria, immersa, epidermide nigrificata arcteque adnata tecta, globoso-lenticularia (350-400 μ), ostiolo non v. vix papillato donata, coriacella atra contextu subopaco parum distincto; asci cylindracei apice truncato-rotundati, crassissime tunicati, deorsum breviter attenuato-pedicellati (90-105 × 5-7 μ), octospori, paraphysibus filiformibus guttulatis parcis obvallati; sporidia oblique monosticha v. subrecte disticha, fusiformia, leniter inaequilateralia

(20-24 × 3,5-4,5 μ), utrinque attenuato-acutissima, fuliginea, grosse 1-guttulata, inferne caudula hyalina brevi acuta aucta.

Hab. In foliis ac culmis emortuis *Rosthkoviae grandiflorae* prope *Shámmacus, Beagle channel,* Maj. 1882.

Obs. Obturaculus ascorum iodi ope pallide coerulescit.

176. Anthostoma microstroma Speg. (n. sp.)

Diag. Fuckelia; stromata elliptica, (2‴ diam. × 1‴ lat.), transversa, pulvinatula (0,5‴ crass.), truncato-marginata, superne applanata, atra, glabra, peridermio tecta, subadnata, non v. vix erumpentia; perithecia globulosa (350-400 μ) atra glabra bina v. terna in quoque stromate, non v. vix ostiolato-papillulata; asci diffluentes, octospori, paraphysati; sporidia elliptica v. ovoidea, utrinque obtusa (18-22 × 10-12 μ), monosticha, grosse 1-guttulata (an areolata?), opace fuliginea, in senectute longitudinaliter fissa.

Hab. Vulgatissimum (sed semper substerile) ad ramos dejectos *Fagi betuloides* in *Staten island,* Mart. 1882.

177. Anthostoma antarcticum Speg. (n. sp.)

Diag. Acervuli difformes, pulvinatuli (3-7‴ diam.), sparsi v. gregarii, saepe confluentes, cortice immersi, stromate e substantia corticali parum mutata infuscata efformato, epidermide sublevata tecti v. denudati; perithecia majuscula, globulosa (400-500 μ) stromate immersa, 3-7-aggregata atra coriacea, ostiolis papillatis subconniventibus parum exertis carbonaceis crassiusculis coronata; asci cylindraceo-clavati, sursum attenuati, apice truncato-rotundati, 1-foveolati (par sp. 45-50 × 6-6,5 μ), deorsum in pedicello parte sporifera subaequilongo producti aparaphysati octospori, iodi ope nulla; sporidia oblique monosticha v. alternato-

disticha, oblongo-ellipsoidea, recta v. curvula (8-13 × 3-3,5 μ) utrinque rotundata, fuliginea.

Hab. Ad ramos dejectos putrescentes *Fagi betuloidis* in *Staten island* prope *Port S. John*, Mart. 1882.

Obs. Species notis perplurimis *A. gastrino* (Fr.) Sacc. affinis.

178. Anthostoma allantosporum Speg. (n. sp.)

Diag. Fuckelia?; pustulae ligno denudato innatae, elongato-lineares, saepius subseriatae, pulvinatulae, majusculae (1-2″ long. × 2-3‴ lat. × 0,5-1‴ crass.), superne applanatae, saepius ostiolis exasperatae; stroma e ligni substantia non v. vix mutata efformatum, extus sordide fuscescens, intus pallescens, linea nigra stricta late per matricem excurrente limitatum; perithecia stromate profundiuscule immersa, monosticha, dense constipata, 20–40 in quoque acervulo globosa majuscula (500–700 μ) membranaceo-coriacella, contextu subindistincte parenchymatico, ostiolo cylindraceo crassiusculo, atro, carbonaceo, obtuso, ruguloso stratum stromaticum superpositum (0,5-1‴ crass.) perforante ac plus minusve exserto donata; asci cylindraceo subclavati, apice obtuse rotundati, postice longiuscule attenuato-pedicellati (p. sp. 60-65 × 5-8 μ — ped. 25-40 × 3 μ), octospori, aparaphysati?; sporidia oblique monosticha rarius subdisticha, elongato elliptica, inaequilateralia, saepius fere allantoidea (vix medio sub incrassatula), utrinque obtusiuscula ac minute 1-guttulata (11-15 × 4 μ), pallide fuliginea.

Hab. In ramis *Fagorum* putrescentibus in *Fuegia* prope *Chair island*, Maj. 1882.

179. Anthostoma alaculuf Speg. (n. sp.)

Diag. Perithecia sparsa v. laxe hinc inde 3-5-gregaria, ligno fere immutato, vix in superficie sordide ac irregu-

lariter fuscescente immersa, globosa gigantea (1,2-1,5‴ diam.), membranacea, atra, opaca, contextu parum distincto, ostiolo vix papillato, non exerto, carbonaceo donata, parietibus alveoli arcte adnata: asci cylindracei, apice obtuse rotundati, postice longiuscule attenuato-pedicellati (par. sp. 160-180 × 8-9 μ — ped. 70-80 × 3-5 μ), octospori, paraphysibus filiformibus densiuscule obvallati, iodi ope nulla; sporidia recte monosticha, elliptica, saepius nonnihil inaequilateralia, utrinque obtusa (18-20 × 8 μ), in sicco saepe e latere compresso-scutellata, opace fuliginea.

Hab. In ligno decorticato *Libocedri*? prope *Port Tom* in *Skiring island*, Jun. 1885.

180. Anthostoma lophiostomoide Speg. (n. sp.)

Diag. Perithecia sparsa, ligno immutato, vix extus canescenti-infuscato immersa globosa subgigantea (900-1200 μ) atra membranacea, alveoli parietibus arcte adnata, contextu indistincto olivaceo, ostiolo vix matricis superficiem attingente non exerto nonnihil umbilicato, a textura ligni subcompresso ac facile lophiostomideo visu, donata; asci cylindracei, antice obtuse rotundati, postice breviuscule crasseque stipitati (140-150 × 7-7,5 μ), paraphysibus granulosis, filiformibus densiuscule obvallati; sporae recte monostichae, ellipticae v. saepius elliptico-subfusoideae (16-17 × 5 μ), utrinque obtuse acutatae, non v. vix subinaequilaterales, primo granulosae v. 2-guttulatae, hyalinae, dein grosse 1-nucleatae fuligineae.

Hab. Vulgatum ad ramos truncosque decorticatos putrescentes per totam *Fuegiam*, hiem. 1882.

181. Anthostoma fuegianum Speg. (n. sp.)

Diag. Perithecia sparsa v. hinc inde laxe gregaria, ligno fere immutato, extus vix dealbato, intus linea stroma-

tica fuscescente notato, immersa, globulosa, majuscula (450-600 μ), atra, globulosa, coriacella, alveoli parietibus arcte adnata, contextu subindistincto, olivaceo, ostiolo conico, parvulo, matricem perforante, ac ejusdem superficiem vix attingente, carbonaceo, tenui coronata; asci cylindracei, paraphysati, octospori, mox diffluentes; sporidia monosticha, elliptico-elongata, non v. vix inaequilateralia utrinque acutiuscule rotundata (20-22 × 6, 5-7,5 μ) opace fuliginea.

Hab. In palo vetusto decorticato *Mayteni* in *Picton island,* Maj. 1882.

Obs. Species difficillime perspicua, vix maculis canescentibus indeterminatis, parvulis (sed non semper), hinc inde minute nigro-punctatis detegenda. Ascis integris nunquam inventis; iodi ope nulla.

182. Anthostoma giganteum Speg. (n. sp.)

Diag. Perithecia hinc inde laxe gregaria v. densiuscule sparsa, ligno immutato, extus albescenti-canescente, ostiolis ac sporis exilientibus nigro-punctato, vix immersa, globosa, gigantea (1,2-1,8‴ diam.), extus cinerascentia, glabra, membranaceo-coriacella, contextu dense parechymatico, subindistincto, facillime integra ex alveolo extrahenda, ostiolo crassiusculo, conico, carbonaceo, atro, matricis superficiem perforante ac non v. vix exertulo coronata; asci cylindracei, apice nonnihil subcoarctati, truncati, bifoveolati, postice breviuscule attenuato-pedicellati e latere compressi! (150-160 × 12-14 × 3-4 μ), octospori, paraphysibus filiformibus obvallati; sporidia oblique monosticha, e fronte elliptica v. ovoidea, utrinque obtusa, grosse 1-nucleato-areolata, e latere valide compressa (25-26 × 8-10 × 2,5-3), opace fuliginea, inferne papilla minuta hemisphaerica, hyalina appendiculata. Iodi ape nulla.

Hab. In truncis dejectis cariosis prope *Port Cook* in *Staten island*, Mart. 1882.

183. Anthostoma urodelum Speg. (n. sp.)

Diag. Perithecia densiuscule sparsa, ligno vix mutato friabili extus canescenti-dealbato hinc inde ostiolorum caussa nigro-punctato immersa, globosa majuscula (350-450 μ), alveoli parietibus arcte adnata, atra glabra coriacella, contextu indistincto fuligineo opaco, ostiolo crassiusculo brevi atro carbonaceo matricis superficem attingente non v. vix prominulo coronata; asci cylindracei, apice obtuse rotundati non v. vix incrassatuli, basi breviter attenuato-pedicellati (p. sp. 95-120 × 4-5 μ — ped. 20-25 × 3 μ), octospori, dense paraphysati; sporidia cylindraceo-elongata non v. vix curvula, superne acutiuscule rotundata, inferne rotundato-subtruncata, appendice pusilla hemisphaerica hyalina aucta, opace fuliginea (12-13 × 2-2,5 μ), e latere non v. vix compressula non v. grosse 1-guttulata.

Hab. In ramis decorticatis putrescentibus *Fagorum* non rarum per *Fuegiam* totam, hiem. 1882.

184. Xylaria antarctica Speg. (n. sp.)

Diag. Xylocoryne; stromata erecta compressa obovato-spathulata, undique fertilia, superne late truncata ac acute marginata, plana v. undulata, crassiuscula (1,5-2″ alt. × 1,2-1,5″ lat. × 2-3‴ crass.), marginibus lateralibus obtusa, intus farcta alba, extus atra non v. minute laxeque rugulosa, non v. vix ostiolato-asperula, inferne in stipite breviusculo crasso terete (5-8‴ long. × 2,5-3‴ crass.) fusco-leproso-puberulo producta, laxe gregaria; perithecia immersa, globosa (400-550 μ), dense constipata, atra carbonacea, non v. vix prominula, ostiolo minutissimo non v. vix papillulato coronata; asci mox diffluentes, non visi; sporidia elliptico-inaequila-

teralia, utrinque acutiuscule obtusata (12 × 5-6 μ), opace fuliginea, non v. utrinque minute 1-guttulata.

Hab. Vulgatissima per *Fuegiam* totam ad caudices fagineos putrescentes, hiem. 1882.

185. Xylaria fuegiana Speg. (n. sp.)

Diag. Stromata erecta, gregaria v. sparsa, conoideo-obclavulata, non v. compressiuscula, undique fertilia (3″ alt. × 1″ lat. × 0,5-1″ crass.), planiuscula undulata non v. vix rugulosa, laxe papillulato-asperula, apice acutiuscula, basi subcoarctatula, intus farcta, lignosa, alba, extus atra, in juventute subcanescenti-pruinulosa, per aetatem saepe pulvere (e sporis exilientibus) nigro viscidulo inspersa, inferne in stipite breviusculo subterete (1,5″ long. × 2-2,5‴ crass.), longitudinaliter rugoso–striato glabro atro–fusco producta; perithecia immersa v. vix prominula globulosa (500–600 μ), atra carbonacea, ostiolo obtuso papillulato coronata; asci mox gelatinoso-diffluentes, octospori, paraphysati; sporidia cymbiformia, utrinque obtusa (10-12 × 5 μ), monosticha, primo grosse 2-guttulata, dein 1-nucleato-areolata, opace fuliginea.

Hab. In trunco putrescente *Mayteni?* in *Hope harbour,* Maj. 1882.

186. Hypoxylon diatrypelloide Speg. (n. sp.)

Diag. Stromata per peridermium arcte adhaerens erumpentia, elongata v. elliptica (3-5‴ × 1–2,5‴), transversa, non v. subtruncato-marginata, pulvinatula (1‴ crass.), superne saepius applanata, fusco-nigra, parce minuteque papillulosa, intus atra; perithecia pauca (5-20) in quoque stromate, dense constipata, e mutua pressione irregulariter obovata (400-450 μ diam.), monosticha, non exerta nec prominula, atra, coriacea, contextu indistincto, ostiolo minutissimo, obtuso, vix papil-

lulato coronata; asci cylindracei, antice obtuse rotundati, postice attenuato-pedicellati (p. sp. 70-80 × 6,5-7 μ — ped. 40-80 × 2-4 μ), octospori, paraphysibus filiformibus densis obvallati; sporidia recte monosticha, cymbiformia, utrinque acutiuscule rotundata (12 × 5-6 μ), opace fuliginea, non v. grosse 1-2-guttulata, per aetatem longitudinaliter fissa.

Hab. Non rarum ad ramos *fagineos* emortuos in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

Obs. Species habitu *Diatrypellis* plurimis accedens, notis fructificationis tamen mox dignoscenda. Iodi ope nulla.

187. Hypoxylon bovei Speg. (n. sp.)

Diag. Perithecia sustancia stromatica parcissima nigra carbonacea connata (rarius solitaria) in ramis corticatis v. decorticatis superficialia, glomerulos magnitudine ludentes (3-20‴ diam.) ac difformes efficientia, globosa, majuscula (0,8-1,4‴ diam.) prominula, superne truncata ac disco plano (0,5-0,7‴ diam.) ambitu ruga acuta elevatula marginato atque centro ostiolo minuto papillulato donato ornata, in prima aetate furfure albo v. flavescente tecta, dein glabra laevia atra carbonacea; asci cylindracei, antice truncato-rotundati crassissime tunicati ac 1-foveolati, postice in pedicello longiusculo attenuati (p. sp. 80-90 × 8-9 μ — ped. 40-50 × 3-5 μ), octospori, paraphysati; sporidia monosticha, cymbiformia, utrinque acutiuscule rotundata (10-14 × 5-7 μ), grosse 1-v. 2-guttulata, opace fuliginea.

Hab. Vulgatissimum ad ramos emortuos *Fagorum* in *Staten island* et per *Fuegiam* totam, aest. et hiem. 1882.

Obs. Species pulcherrima! certe huc *Hyp. annulatum* Mntgn. (in Gay, Fl. Chil. Vol. VII, p. 445, et Alt. Bot. cryp. lam. 10, f. 3) trahendum, nam specimina *Sphaeriae* (Hyp.) *annulatae* Schw. a Cl. J. B. Ellis in N. A.

Fungi edita a typo fuegiano longissime omnibus characteribus abhorrent.

188. Hypoxylon creoleucum Speg. (n. sp.)

Diag. Stromata cortice insidentia per peridermium erumpentia, eoque secedente denudato-superficialia, effuso-pulvinulata (2-3″ long. × 1″ lat. × 1-1,5‴ crass.), obtuse marginata, subrepandula, superne convexulo-explanata, non v. parce undulata, non v. vix hinc inde papillulosa, sordide fusco-testacea v. subrubiginosa, glabra intus alba; perithecia globulosa e mutua pressione compressa (450-600 μ), coriacella atra, contextu indistincto, immersa non v. vix prominula, ostiolo non v. vix papillulato donata; asci cylindracei antice obtuse rotundati, postice in pedicello longissimo attenuati (p. sp. 65-85 × 6-7 μ — ped. 120 × 1-3 μ), octospori, paraphysibus nullis v. paucis filiformibus guttulatis immixti; sporidia recte v. suboblique monosticha, elliptica v. navicularia, utrinque obtusiuscule rotundata (11-12 × 5-6 μ), non v. grosse 1-2-guttulata opace fuliginea.

Hab. Non rarum in ramis dejectis putrescentibus *Fagorum* in *Fuegia*, hiem. 1882.

189. Hypoxylon magellanicum Speg. — Fung. pat. n. 123.

Hab. In ligno mucido carioso *Fagi betuloidis* prope *Ushuvaia* et *Slogget bay*, hiem. 1882.

Obs. Specimina nonnulla peritheciis nitentibus ostiolo minore donatis, sporis nonnihil majoribus (17-19 × 8-9 μ), grosse 1-guttulato-areolatis, a typo vix recedunt.

190. Hypoxylon rubiginosum (Pers.) Fr. — Sacc., Syll. I, p. 376.

Hab. Vulgatum ad ligna emortua in sylvis per *Fuegiam* totam nec non in *Staten island*, aest. et hiem. 1882.

Obs. Specimina fuegiana nonnihil a typo et inter se discrepant, ac formas 2 sequentes separare hausus non sum:

a) robustum; stromatibus ligno indurato infuscatoque superficialibus crustaceis late effuso-pulvinatulis difformibus (2-10″ × 1-3″), crassiusculis, abrupte obtuseque marginatis, scrupulosis non v. vix mammillosis, laxe hinc inde papillulosis, fusco-rubiginosis; sporidiis elliptico-navicularibus (10-15 × 8 μ), fuligineis donatum.

b) miserrimum; stromatibus irregulariter sublinearibus, flexuosis, ligno dealbato, submucedineo, fragillimo innato-effusis, non v. vix pulvinulatis ac marginatis, submammillosis, laxe papillulosis, fusco-rubiginosis; sporidiis ellipticis v. ovoideis, plus minusve inaequilateralibus (12-15 × 5-7 μ), grosse 1-2-guttulatis, fuligineis donatum.

191. Hypoxylon pseudopachyloma Speg. (n. sp.)

Diag. Stromata corticola, per perdermium persistens erumpentia, superne nuda, longe lateque effusa (2-5″ × 1-4″) applanata vix pulvinulata (1‴ crass.), non v. vix repandula-submarginata, carbonacea, extus intusque aterrima, fragilia, saepe ob sporas exilientes nigro-pulverulenta, densiuscule minuteque papillulata; perithecia obovata (750-800 alt. × 250 μ diam.), dense constipata atra carbonacea superne applanata non prominula, ostiolo papillulato minuto ornata; asci cylindracei antice obtuse rotundati crasse tunicati 1-foveolati, postice in pedicello brevissimo attenuati (75-80 × 6 μ), octospori, paraphysibus parcis filiformibus crassis inmixti; sporidia recte v. oblique monosticha elliptico-navicularia utrinque obtusiuscula (9-15 × 4-6 μ) non v. grosse 1-guttulata, opace fuliginea.

Hab. Vulgatum ad ramos emortuos *Fagorum* in *Staten island* et in *Fuegia,* aest. et hiem. 1882.

Obs. Species pulchella, habitu fere *Diatrypis stigmatis* (Hoff.) Fr. notis fructificationis mox dignoscenda; si haec species v. altera (in Fung. arg. pug. IV, n. 132), typum *Hypoxyli pachylomatis* (Lév.) Mntgn. sistat, nunc nonnihil dubius sum !.

192. Daldinia concentrica (Bolt.) Ces. et DNtrs. ?—Sacc., Syll. I, p. 393.

Hab. In trunco emortuo *Fagi obliquae?* prope *Ushuvaia,* Maj. 1882.

Obs. Specimen unicum obliteratum senescens inventum, textura stromatis fibrosa, sericeo-nitente, pallescenti-zonata vix dignoscendum; peritheciis ac sporidiis non visis.

193. Sphaerella aiacu Speg. (n. sp.)

Diag. Maculae marginales, majusculae, determinatae, fuscescentes, linea incrassatula rufescente cinctae; perithecia epiphylla, densissime gregaria, minuta, subglobosa (70–80 μ), epidermide velata prominula glabra atra coriacella, contextu parenchymatico olivaceo, ostiolo impresso donata; asci fusoideo-obclavati, apice truncato-rotundati subcrassiuscule tunicati late 1-foveolati, basi in pedicello brevissimo crassoque cuneato–producti (30-35 × 5 μ), octospori, aparaphysati; sporidia clavulato-acicularia, utrinque obtusiuscule acutata (10-12 × 2 μ), medio 1-septata non constricta, hyalina.

Hab. Ad folia languida *Mayteni* prope *Picton island,* Maj. 1882.

194. Sphaerella antarctica Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla, sparsa, parenchymate immersa, epidermide velata, vix prominula e globoso conica (80-100 μ), atra, glabra, coriaceo-

membranacea, contextu majuscule parenchymatico olivaceo donata, ostiolo papillulato coronata; asci cylindracei, non v. vix obclavulati, apice rotundati, tunica vix incrassata, basi subcoarctati ac stipite brevissimo, noduloso suffulti (25-30 × 3,5-4 μ), octospori, aparaphysati; sporidia elongato-subclavulata, utrinque acutiuscula (7,5-8,5 × 1,5 μ), medio septata, non constricta, leniter curvula, hyalina.

Hab. Ad folia dejecta *Fagi antarcticae* ubique vulgata in *Fuegia,* hiem. 1882.

195. Sphaerella australis Speg. (n. sp.)

Diag. Maculae nullae v. amphigenae parum manifestae indeterminatae rufescentes v. fuscecentes; perithecia hypophylla, hinc inde densiuscule multi-gregaria, immersa, epidermide velata, e conoideo lenticularia (75-80 μ), vix prominula atra glabra tenui membranacea, contextu parenchymatico, olivaceo, ostiolo impresso donata; asci cylindraceo-obclavati, antice truncato-rotundati, crassiuscule tunicati, postice abrupte coarctati ac pedicello brevissimo noduloso suffulti (20-25 × 5-6 μ), octospori, aparaphysati; sporidia di-tristicha, e cylindraceo subclavulata sursum obtusiuscula, deorsum acutiuscule rotundata (9-10 × 2 μ), medio 1-septata, non v. vix constrictula, hyalina.

Hab. Ad folia dejecta *Berberidis ilicifoliae* in dumetis in *Staten Island*, Mart. 1882.

196. Sphaerella embotryi Speg. (n. sp.)

Diag. Maculae nullae v. vix manifestae, totum folium ambientes, cinerascentes; perithecia hypophylla dense aggregata immersa epidermide velata vix prominula, e conico lenticularia (50-70 μ) coriacello-membranacea, contextu parenchymatico-olivaceo parum distincto, ostiolo impresso perforata; asci obclavati, antice trun-

cato rotundati, postice abrupte coarctati, ac pedicello brevissimo, crassiusculo suffulti (25-30 × 10 μ), octospori, aparaphysati; sporidia elliptico-clavulata, utrinque obtusiuscula (8 × 3 μ), medio 1-septato-constricta, loculis subcoarctatis, hyalina.

Hab. Ad folia languida v. dejecta *Embotryi coccinei* in insula *Aicina, Beagle channel,* Maj. 1882.

197. Sphaerella fuegiana Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla, sparsa, lenticularia (90–100 μ), atra glaberrima membranaceo–coriacella, contextu dense parenchymatico olivaceo; asci cylindraceo-obclavati, apice rotundato-subtruncati crasse tunicati non v. vix 1-foveolati, basi abrupte minuteque coarctato-stipitati (30-40 × 8-10 μ), octospori, aparaphysati; sporidia elliptico-obovata, utrinque obtusiuscula (7,5-8,5 × 3-4 μ), loculo supero nonnihil crassiore brevioreque, hyalina.

Hab. Ad folia *Acaenae adscendentis* languida rarissime in *Shammacus,* Maj. 1882.

198. Sphaerella gunnerae Speg. (n. sp.)

Diag. Maculae nullae v. pallescentes, indeterminatae; perithecia epiphylla, sparsa, immerso-prominula, e conico lenticularia (80-90 μ), glabra atra coriacella contextu atro indistincto ostiolo minuto perforata; asci cylindraceo-clavati, sessiles, antice rotundati tenue tunicati, postice attenuato-rotundati (45 × 9 μ), octospori, aparaphysati; sporidia elliptico–subclavulata, utrinque obtusiuscula (8-9 × 3 μ), medio septata, non constricta, hyalina.

Hab. Ad folia viva v. languida *Gunnerae lobatae* in pratis uliginosis, *Basket island,* Maj. 1882.

199. Sphaerella mayteni Speg. (n. sp.)

Diag. Maculae nullae v. totum folium ambientes arescenti-cinereae, indeterminatae; perithecia hypophylla laxe gregaria epidermide velata prominula e lenticulari conoidea (100-120 μ) atra glabra coriacella, contextu parenchymatico fuligineo, ostiolo minuto perforata; asci obclavati, antice truncato-rotundati, crassiuscule tunicati, postice abrupte coarctati ac pedicello parvulo noduloso suffulti (50-55 × 10 μ), octospori, aparaphysati; sporidia disticha elliptico-elongata subclavulata utrinque obtusa (12-13 × 4 μ) medio 1-septata non v. vix constricta hyalina.

Hab. Ad folia emortua adhuc pendula *Mayteni* prope *Shammacus*, Maj. 1882.

Obs. A *Sph. aiacu* Speg. toto coelo diversa!

200. Sphaerella patagonica Speg. — Fung. pat. n. 124.

Hab. Ad folia emortua *Azorellae trifurcatae* vulgatissima per *Fuegiam* totam, aut. et hiem. 1882.

201. Sphaerella pernettiae Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla sparsa, e globoso lenticularia (100-120 μ), epidermide velata, prominula atra glabra coriaceo–membranacea, contextu indistincto fuligineo opaco, ostiolo pusillo perforata; asci obclavati, antice truncato-rotundati non v. vix 1-foveolati postice attenuato-coarctati, stipite brevissimo crasso noduloso suffulti (40-45 × 10-12 μ), octospori, aparaphysati; sporidia di-polysticha e cylindraceo fusoidea, utrinque obtusiuscula (15-17 × 3 μ), saepius curvula, medio 1-septata non constricta, hyalina.

Hab. Ad folia emortua arida dejecta v. adhuc pendula *Pernettiae mucronatae* in *Staten island*, Mart. 1882.

202. Sphaerella rosthkoviae Speg. (n. sp.)

Diag. Maculae nullae v. late ambientes, indeterminatae

e pallescenti fuscescentes; perithecia sparsa immersa vix prominula lenticularia (90-95 μ) atra glabra coriacella, contextu densiuscule parenchymatico fusco-atro; asci ovati, antice truncato-rotundati crassissime tunicati latissime 1-foveolati, postice rotundato-coarctati (26-28 × 8 μ) stipite brevissimo noduloso suffulti; sporidia inordinata elliptico-clavulata, utrinque obtuse rotundata (8 × 1,5-2 μ) primo grosse 4-guttulata, dein 1-septata non constricta, hyalina.

Hab. In culmis dejectis putrescentibus *Rosthkoviae* (*junci*) *grandiflorae* in *Staten island*, Maj. 1882.

203. SPHAERELLA TRISETI Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla sparsa v. laxe gregaria ac subseriata immersa non v. vix prominula lenticularia (70-80 μ) tenui membranacea, contextu parenchymatico fuligineo, ostiolo latissimo (20 μ diam.) impresso perforata, globosa laevia; asci cylindraceo-ovati, antice truncato-rotundati crasse tunicati non foveolati, postice brevissime cuneati (24-26 × 8 μ) stipite brevissimo crasso noduloso suffulti, octospori, aparaphysati; sporidia di-polysticha, subclavulato-elliptica, utrinque truncato-rotundata (10-12 × 2,5 μ), medio 1-septata constrictula, loculo supero nonnihil crassiore, hyalina.

Hab. Ad folia languida *Triseti* in summis montibus in *Staten island*, Maj. 1882.

204. SPHAERELLA USHUVAIENSIS Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa epidermide velata lenticularia (90-100 μ) atra glabra coriacea opaca, contextu tantum in parte infera distincte majusculeque parenchymatico fuligineo, ostiolo minuto pertusa; asci cylindraceo-obclavati, antice obtuse rotundati v. subtruncato-rotundati subcrassiuscule tunicati non v. vix

1-foveolati, postice attenuato-rotundati (28-32 × 5 μ), stipite breviusculo crassiusculoque suffulti, octospori, aparaphysati; sporidia cylindraceo-subclavulata, utrinque acuta sed obtuse rotundata (7-9 × 2 μ), medio 1-septata leniter constricta, loculis minute 2-guttulatis, supero vix crassiore, hyalina.

Hab. In caulibus emortuis aridis *Galii antarctici* prope *Ushuvaia*, Maj. 1882.

205. Didymella? carphae Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa v. laxissime gregaria globoso-lenticularia (130-150 μ) epidermide velata atra glabra membranaceo-coriacella, contextu densiuscule parenchymatico fuligineo, ostiolo vix papillulato obtuso donata; asci cylindracei, apice truncato-rotundati crassiuscule tunicati, basi breviter attenuato-pedicellati (55-60 × 6-7 μ), paraphysibus crassiusculis guttulatis inmixti, octospori; sporidia elliptico-ovoidea v. subbiconica, utrinque obtusiuscula (10 × 4,5-5 μ), primo continua hyalina, dein diblasta pallide fuscescentia.

Hab. Ad scapos vaginasque *Carphae schoenoidis* in *Staten island*, Mart. 1882.

206. Epicymatia vulgaris Fr.— Sacc., Syll. I, p. 571.

Hab. Non rara in *apotheciis* lichenum plurimorum in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

207. Venturia antarctica Speg. (n. sp.)

Diag. Maculae nullae; perithecia superficialia subglobosa (60-90 μ), sparsa v. laxe gregaria atra laevia ad partem superam pilis brevissimis carbonaceis atris opacis rigidulis acutis basi non v. vix incrassatis (40-45 × 3-4 μ) laxe vestita, coriacella, contextu sinuoso-parenchymatico densissimo parum distincto fuligineo do-

nata, ostiolo minuto pertusa; asci subfusoidei, antice truncati crassiuscule tunicati bifoveolati, postice attenuati ac pedicello crassiusculo suffulti (25-27 × 4-5 μ), octospori, aparaphysati; sporidia recte v. oblique disticha nonnihil inaequilateralia v. subcurvula, medio 1-septata ac leniter constricta, loculis subaequalibus v. supero non v. vix majore, utrinque obtusiuscula (6-7 × 2-2,5 μ), minute 4-guttulata, hyalina.

Hab. Ad hypophyllum foliorum putrescentium *Mayteni* prope *Shammacus*, Maj. 1882.

208 Venturia microspora Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa v. laxe gregaria, subseriata globosa (120-150 μ), in sicco collabescentia, pilis opacis atris acutis basi non v. vix dilatatis (20-30 × 2-3 μ) undique densiuscule vestita, tenui membranacea, contextu indistincto atro opaco donata, ostiolo vix papillulato obtuso coronata; asci subclavulato-fusoidei, antice late truncato-rotundati non v. vix crassiuscule tunicati, deorsum breviter attenuato-pedicellati (24-25 × 2-2,5 μ), octospori, aparaphysati; sporidia elliptico-elongata, non v. leniter inaequilateralia v. subcurvula, medio 1-septata non constricta, utrinque obtuse rotundata v. subtruncata (5 × 1 μ), loculis grosse biguttulatis, hyalina.

Hab. Ad folia dejecta v. languida *Faestucae magellanicae* in *Staten island*, Mart. 1882.

209. Venturia? fuegiana Speg. (n. sp.)

Diag. Maculae nullae; perithecia hinc inde laxe gregaria, ligno denudato insidentia, subglobosa (sicca collapsa), parvula (110-130 μ), pilis carbonaceis aculeiformibus acutis opacis basi non incrassatis (25-40 × 5 μ) praecipue in parte supera laxe vestita, membranaceo-coriacea, contextu subindistincto atro, ostiolo impresso per-

forata; asci obclavati antice rotundato-subtruncati crassiuscule tunicati 1-foveolati, deorsum subcoarctato-rotundati brevissime minuteque stipitati (40-45 × 5 μ), octospori, aparaphysati; sporidia recte v. oblique disticha, elliptico-elongata, quandoque non v. vix obovata, utrinque obtuse rotundata (11-12 × 3 μ), recta v. leniter inaequilateralia, diblasta, hyalina.

Hab. Ad ramos dejectos decorticatos putrescentes *Fagi betuloidis* in *Staten island*, Mart. 1882.

Obs. Species *Eriosphaeriae exiguae* Sacc. (Syll. I, p. 517) peraffinis; generi *Venturia* illam adscripsi praecipue paraphysibus deficientia.

210. Eriosphaeria australis Speg. (n. sp.)

Diag. Perithecia sparsa globosa (400-450 μ) peridermio sublevato velata, eoque saepius secedente libera, superficialia atra molliter rufescenti-villosa, pilis cylindraceis longiusculis obtusis basi non incrassatis (100-150 × 5 μ) rectis v. flexuosulis pluriseptatis pallide rufescentibus vestita, coriaceo-membranacea, contextu parenchymatico fuligineo, ostiolo impresso pertusa; asci fusoideo-subclavati (120-130 × 12-13 μ), antice truncato-rotundati, deorsum breviter crasseque attenuato-pedicellati octospori subdiffluentes, paraphysibus parcis mucosis immixti; sporidia recte disticha, elliptico-elongata (24-28 × 6-7 μ), leniter inaequilateralia v. subcurvula, utrinque obtusiuscula, primo continua hyalina, dein grosse 2-guttulata, postremo diblasta dilute fuscescentia.

Hab. Ad ramos emortuos *Berberidis ilicifoliae* prope *Port Cook* in *Staten island*, Mart. 1882.

211. Eriosphaeria ? vulgaris Speg. (n. sp.)

Diag. Perithecia sparsa, superficialia, subglobosa (350-400 μ) atra canescenti-villosa, pilis rectis acutis, 1-

cellularibus basi fuscescentibus apice hyalinis tenuissime canaliculatis (500-900 × 20 μ) rigidulis dense vestita, coriacea, contextu opaco atro indistincto, ostiolo minute umbonato ornata; asci......?; sporidia......?, non visa.

Hab. Vulgatissima ad ramos dejectos decorticatos putrescentes *Fagi betuloidis* per totam *Fuegiam* (semper sterilis), aest. et hiem. 1882.

212. Melanconis antarctica Speg.—Fung. pat. n. 128.

Hab. Vulgata in ramis dejectis *Fagorum* per *Fuegiam* totam, hiem. 1882.

Obs. Stroma albo-flavescens v. sulfureum; sporidia (25–30 × 5–7 μ) per aetatem denudata ecaudata pallidissime rufescenti-carnea.

213. Diaporthe ambiens Fuck. — Sacc., Syll. I, p. 660.

Hab. In caulibus emortuis *Cerastii* spec. in scopulosis prope *Port Cook, Staten island,* Mart. 1882.

Obs. Asci cylindraceo-fusoidei (40-45 × 5 μ); sporidia cylindraceo-elliptica utrinque obtusa (9-10 × 3 μ) hyalina, medio 1-septata non constricta, loculis 2-guttulatis.

214. Diaporthe Winteri Speg. (n. sp.)

Diag. Tetrastaga; stromata parum manifesta late per corticem excurrentia; perithecia hinc inde sparsa v. plus minusve dense aggregata, peridermium non v. vix fissum ac pustulato-elevatum tecta, globulosa (300-350 μ) coriaceo-membranacea atra glabra, contextu indistincto opaco, ostiolo carbonaceo vix papillulato coronata; asci fusoideo-clavati, antice obtuse rotundati v. subtruncati crasse tunicati bifoveolati, postice attenuati acutato-rotundati sessiles (60-65 × 8-9 μ), octospori, aparaphysati; sporidia oblique mono-v. disticha, elliptica non v. subovata, utrinque obtuse rotundata

(12-14 × 3,5-5 μ), recta v. leniter inaequilateralia, medio 1-septata constrictula, loculis (supero non v. vix crassiore) granuloso-farctis saepe minute biguttulatis, hyalina.

Hab. Ad corticem ramorum emortuorum *Drymidis Winteri* in *Staten island*, Mart. 1882.

215. Diaporthe antarctica Speg. (n. sp.)

Diag. Euporthe; stromata plus minusve late effusa, in ramis denudatis maculas extus irregulariter elongata, strictas (1-2″ × 1-2‴) tumidulas atras subcrustosas, intus pallescentes v. albas linea tenuissima candida limitatas efficientia; perithecia densiuscule constipata subseriata ligno immersa subprominula globulosa (400-450 μ) tenui membranacea fusca, contextu parenchymatico oblongo subimperspicuo donata, ostiolo minuto obtuso brevissimo non v. vix papillulato coronata; asci fusoidei, antice obtuse rotundati, postice attenuato-acutati (40-60 × 10-14 μ), octospori, aparaphysati; sporidia oblique disticha, elliptica utrinque obtuse acutata (14-15 × 5-6 μ), medio 1-septata lenissime constricta, loculis non v. grosse 2-guttulatis, hyalina.

Hab. Ad ramos emortuos *Pernettiae mucronatae* in dumetis in *Staten island*, Mart. 1882.

216. Diaporthe magellanica Speg.—Fung. pat. n. 129.

Hab. Ad ramos emortuos *Ribis magellanicae* in *Staten island* et *Fuegia*, vulgata per aest. et hiem. 1882.

217. Diaporthe fuegiana Speg. (n. sp.)

Diag. Euporthe; stromata plus minusve late effusa in ramis decorticatis, maculas extus atras crustosas undulatas irregulariter lineares (1-5″ × 1-3‴) flexuosas intus albas linea nigra tenui limitatas efficentia; perithecia densiuscule constipata v. subseriata ligno im-

mersa, contextu parenchymatico-sinuoso subindistincto donata, ostiolo carbonaceo elongato longiuscule exerto crassiusculo recto v. flexuoso coronata; asci fusoidei, apice stricte rotundato subtruncati, postice acutato-rotundati (60-65 × 10 μ), octospori, aparaphysati; sporidia oblique disticha, elliptico-elongata, utrinque acuta ac strictissime rotundato-subtruncata (18-20 × 5-6 μ) medio 1-septata non constricta, loculis saepe parce coarctatulis non v. grosse 2-guttulatis, hyalina.

Hab. Non rara in ramis emortuis *Chiliotrichi amelloidis* per *Fuegiam* totam, hiem. 1882.

KACOSPHAERIA Speg. (n. gen.)

Diag. Perithecia *Calophaeriae;* asci clavati octospori, paraphysati; sporidia botuliformia 1-septata hyalina.

218. KACOSPHAERIA ANTARCTICA Speg. (n. sp.)

Diag. Acervuli sparsi v. laxe gregarii discoidei (1-1,5‴ diam.) pustuliformes, in cortice nidulantes peridermio parum elevato tecti ac eum disculo perforantes; perithecia pauca (4-9) in quoque acervulo valsiformiter laxe aggregata nuda atra nitidula glabra parvula (280-320 μ) coriacella, contextu opaco indistincto, ostiolis breviusculis obtusis crassiusculis conniventibus, disculum non v. vix exertum saepe griseo-pulverulentum efformatibus donata; asci clavati, antice obtusissime rotundati crassiuscule tunicati, deorsum in pedicello longiusculo attenuati (p. sp. 22-25 × 4-5 μ — ped. 18-25 × 2 μ), octospori paraphysibus duplo longioribus parcis crassiusculis inmixti; sporidia di-tristicha, botuliformia utrinque obtuse rotundata (9-11 × 1,5 μ), primo diblasta, dein distincte medio 1-septata non constricta, hyalina.

Hab. Ad ramos dejectos emortuos *Ribis magellanicae* prope *Ushuvaia,* Jun. 1882.

219. Didymosphaeria empetri (Fr.) Sacc. — Syll. I, p. 704.

Hab. Ad folia ramosque emortuos *Empetri rubri* non rara in *Staten island,* Mart. 1882.

Obs. Asci cylindracei (70-75 × 10 μ), antice truncato-rotundati, postice brevissime attenuato-pedicellati; sporidia oblique monosticha, elliptico-cylindracea utrinque obtusa (14-15 × 5 μ) subinaequilateralia, pallide fuliginea.

220. Delitschia patagonica Speg. — Fung. pat. n. 130.

Hab. In fimo *ovino* et *auchenino* prope *Ushuvaia* et *Slogget bay,* Maj. et Jun. 1882.

Obs. Specimina fuegiana omnibus partibus nonnihil majora; perithecia 750-900 μ diametro; asci 250-260 × 25-30 μ; sporidia 40-45 × 18-20 μ. An species distincta?

221. Metasphaeria insularis Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa immersa globulosa (180-200 μ) coriacella atra glabra, contextu pellucido subindistincte parenchymatico fuligineo, ostiolo rotundo-carbonaceo papillulato epidermidem perforante non v. vix exerto donata; asci cylindracei, antice rotundati subcrassiuscule tunicati, deorsum breviter attenuati ac in pedicello brevissimo crassoque (100-110 × 8-10 μ) producti, octospori, paraphysibus densiusculis filiformibus obvallati; sporidia recte v. alternato-disticha, fusoidea, utrinque acutiuscula (19-22 × 4 μ), 5-7-blastes v. 5-7-septata, ad septa parce constricta, loculo tertio supero saepius nonnihil crassiore, strato mucoso hyalino crasso cincta, hyalina.

Hab. Ad vaginas putrescentes *Poae Forsteri* in marittimis prope *Penguin rookery, Staten island,* Mart. 1882.

Obs. Ascorum sporarumque structura lophiostomacea sed ostiolo rotundo !

222. Melomastia antarctica Speg. (n. sp.)

Diag. Perithecia sparsa ligno immersa v. basi tantum insculpta e conoideo globosa magnitudine ludentia (400-900 μ) atra carbonacea glabra laevia, contextu indistincto, ostiolo crasso acuto rigido saepe deciduo breviusculo instructa; asci cylindracei, apice truncati crasse tunicati 1-foveolati, deorsum breviter crasseque attenuato-pedicellati (130-150 × 6 μ), octospori, paraphysibus densissimis filiformibus obvallati; sporidia recte monosticha, cylindraceo-elliptica, utrinque rotundata (15 × 4,5 μ), primo 3-blasta, dein 2-septata, ad septa constricta, loculis grosse 1-guttulatis, hyalina.

Hab. Ad ramos dejectos *Pernettiae mucronatae, Empetri rubri* et *Escalloniae serratae* non rara in *Staten island*, Mart. 1882.

223. Zignoella antarctica Speg. (n. sp.)

Diag. Perithecia in matrice canescenti-fuscescente sparsa v. gregaria, globulosa (350-400 μ) e latere nonnihil compressa carbonacea glaberrima laevissima basi insculpta, contextu indistincto, ostiolo crassiusculo rigido obtuso umbilicato-scutato coronata; asci clavati mox diffluentes paraphysibus filiformibus densis obvallati; sporidia elliptico-elongata, utrinque rotundata (20-30 × 5 μ), triseptata, ad septa non constricta, loculis non v. guttulatis, hyalina.

Hab. Ad truncos putrescentes decorticatos *Fagi betuloidis* in *Staten island*, Mart. 1882.

224. Zignoella australis Speg. (n. sp.)

Diag. Perithecia in matrice dealbata sparsa v. hinc inde laxe gregaria, e globoso conoidea (180-200 μ), vix basi

insculpta, carbonacea, atra, laevia; asci cylindracei, apice truncati crasse tunicati minute 1-foveolati, basi breviter crasseque attenuato-pedicellati (75-80 × 6-7 μ), octospori, aparaphysati, iodi ope nulla; sporidia elliptico-elongata, parce inaequilateralia (16-17 × 3-3,5 μ), utrinque obtuse rotundata, grosse 4-6-guttulata, 3-septata, ad septa non constricta, hyalina.

Hab. In ligno putrescente *Fagi betuloidis* in *Staten island*, Mart. 1882.

225. Zignoella fuegiana Speg. (n. sp.)

Diag. Perithecia in matrice dealbata immersa vix superne parce exerta, e globoso-compressula (350-400 μ), sparsa v. hinc inde laxe gregaria v. subseriata, atra, glabra, superne membranacea, contextu parum distincto pallide olivaceo, ostiolo vix papillulato crasso obtuso late pertuso rotundo carbonaceo donata; asci leniter obclavati, antice rotundato-truncati crassiuscule tunicati late 1-foveolati, deorsum rotundato-coarctati pedicello brevissimo crasso noduloso suffulti (55-65 × 15-20 μ), octospori, paraphysibus parcis filiformibus obvallati; sporidia di-tristicha, obovata, superne obtusiuscula inferne acutiuscule rotundata (19-20 × 6-7 μ), 3-septata, ad septa non constricta, hyalina.

Hab. In truncis fagineis decorticatis putrescentibus prope *Ushuvaia* et *Slogget bay*, hiem. 1882.

226. Zignoella leptosperma Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa v. hinc inde 2-4-gregaria globosa (350-400 μ) superficialia laevia glabra carbonacea atra, contextu indistincto, ostiolo impresso pertusa; asci cylindraceo-fusoidei, apice truncati crassiuscule tunicati, deorsum breviuscule ac tenuiter cuneato-pedicellati (150-200 × 10-14 μ), octospori, aparaphysati; sporidia oblique mono-v. di-sticha, cylin-

draceo-fusoidea, utrinque acutiuscula (45-48 × 5-6 μ), 6-blasta, hyalina.

Hab. In ramis decorticatis putrescentibus *Pernettiae mucronatae* in *Wallamatu, Beagle channel,* Maj. 1882.

227. Zignoella longispora Speg. (n. sp.)

Diag. Maculae late effusae indeterminatae atrae; perithecia sparsa v. laxe gregaria, superficialia, e globoso obovata (220-350 μ), atra glabra, carbonacea, contextu indistincto opaco, ostiolo minutissimo vix papillulato donata; asci e fusoideo subclavati, antice rotundati non v. vix crasse tunicati late 1-foveolati, deorsum brevissime crasseque attenuato-pedicellati (110-120 × 6-7 μ), octospori, paraphysibus paucis filiformibus crassiusculis guttulatis obvallati; sporidia di-tri-sticha acicularia v. fusoideo-elongata, non v. vix superne incrassatula, saepius subcurvula, utrinque acuta (50-60 × 2-4 μ), grosse 6-guttulata, hyalina.

Hab. In ramis putrescentibus *Berberidis ilicifoliae* in *Port Tom, Schyring island,* Jun. 1882.

228. Leptosphaeria antarctica Speg. (n. sp.)

Diag. Maculae nullae v. fuscescentes indeterminatae parvulae; perithecia saepius gregaria v. subseriata immersa non prominula, globulosa (200-250 μ), atra, glabra tenui membranacea, contextu parenchymatico fuligineo, ostiolo vix papillulato epidermidem perforante sed non exerto ornata; asci cylindracei, antice obtuse rotundati crassiuscule tunicati late 1-foveolati, postice attenuato-cuneati pedicello brevissimo crasso noduloso suffulti (75-80 × 10 μ) octospori, paraphysibus filiformibus obvallati; sporidia elongato-fusoidea, utrinque obtusiuscule rotundata (45 × 3 μ), non v. vix inaequilateralia, 7-septata, ad septum medium tantum constricta, loculis granuloso-farctis, pallide olivascentia.

229. Leptosphaeria crepini (West.) DNtrs. — Sacc., Syll. II, p. 79.

Hab. Non rara in foliis bracteisque *Lycopodii magellanici* in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

Obs. Asci clavulati (90-100 × 12-13 μ) parce paraphysati; sporidia disticha elliptico-elongata (26-30 × 8-9 μ), utrinque obtusiuscula, triseptata, flavida.

230. Leptosphaeria culmifraga (Fr.) Ces. et DNtrs — Sacc., Syll. II, p. 75.

Hab. Vulgata ad culmos putrescentes graminacearum majorum per totam *Fuegiam*, aest. et hiem. 1882.

231. Leptosphaeria fuegiana Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa hypophylla immersa non v. vix prominula, globulosa (150-200 μ), atra, glabra, membranacea, contextu pellucido grosse parenchymatico-fuligineo, ostiolo subcarbonaceo papillulato epidermidem perforante sed non exerto donata; asci cylindracei, antice rotundati, postice breviter cuneato-rotundati, stipite brevissimo crassoque suffulti (40-45 × 10 μ), octospori, aparaphysati; sporidia di-tri-sticha, elliptico-fusoidea, utrinque acutiuscule rotundata (18-20 × 5 μ), triseptata, ad septum medium non v. leniter constricta, loculis eguttulatis, secundo supero crassiore, flavescentia.

Hab. In *Hierochloae antarcticae* foliis culmisque putrescentibus in pratis prope *Penguin rookery, Staten island,* Mart. 1882.

232. Leptosphaeria maculans (Dsm.) Ces et DNtrs. — Sacc., Syll. II, p. 35.

Hab. In caulibus emortuis putrescentibus *Perremondiae* spec. in *Aicina* insula, *Beagle channel,* Maj. 1882.

233. Herpotrichia antarctica Speg. (n. sp.)

Diag. Perithecia ligno insidentia, cortice tecta, eoque secedente nuda, superficialia laxe gregaria, globulosa (200-250 μ), atra, molliter fusco-lanuginosa, pilis gracilibus (100-600 × 2 μ) continuis apice obtusiusculis non ramosis noduloso-veruculosis fuligineis dense intricatis vestita, coriaceo-membranacea, contextu opaco atro indistincto, ostiolo impresso concolore pertusa; asci cylindracei v. cylindraceo-subclavati, antice obtuse rotundati, deorsum in pedicello subbreviusculo crasso attenuati (55-75 × 7-8 μ), octospori, densiuscule paraphysati; sporidia recte disticha v. oblique monosticha, elliptico-obovata, utrinque obtusiuscule acutata (14 × 4 μ), 3-septata, ad septum medium constrictula, fuliginea, loculis 2 mediis non v. vix obscurioribus.

Hab. In ramis emortuis v. languentibus *Chiliotrichi amelloidis* in *Staten island,* Mart. 1882.

234. Melanomma australe Speg. (n. sp.)

Diag. Perithecia ligno denudato insidentia v. cortice secedente tecta, densiuscule aggregata, subsuperficialia, basi vix insculpta, globulosa (180-250 μ), atra, glaberrima, laevissima, saepe subnitentia, carbonacea, contextu opaco indistincto, ostiolo minuto vix impresso (rarius subpapillulato) donata; asci cylindracei apice rotundati crassiuscule tunicati late 1-foveolati, deorsum breviter crasseque attenuato-pedicellati (75-110 × 6-8 μ), octospori, dense paraphysati; sporidia oblique monosticha, elliptico-ovoidea, utrinque obtusiuscula (12-15 × 5-5,5 μ), 3-septata, non v. leniter inaequilateralia, ad septa constrictula, praecipue ad medium, loculis saepius grosse 1-guttulatis, pallide ex olivaceo cinerascentes.

Hab. Vulgata in ramis emortuis *Pernettiae, Ribis, Chi-*

liotrichi, Empetri, Myrti, etc. per totam *Fuegiam* et *Staten island,* aest. et hiem. 1882.

235. Melanomma fuegianum Speg. (n. sp.)

Diag. Chaetomastia; perithecia ligno nigrificato sparsa v. aggregata, subglobosa (130–150 μ), basi insculpta, atra, primo laxe puberula, pilis conoideis opacis acutis (15 × 2 μ) vestita, per aetatem glabrata, carbonacea, contextu indistincto atro opaco, ostiolo non v. vix papillulato coronata; asci cylindracei v. subfusoideo-cylindracei, antice truncato-rotundati crassiuscule tunicati, postice brevissime crasseque attenuato-pedicellati (50 × 6 μ), octospori, parce paraphysati; sporidia recte v. oblique disticha v. monosticha, elliptico-obovatula v. subbiconica, recta, utrinque acutiuscula (10-11 × 3 μ), 3-septata, ad septa leniter constricta, pallide fuliginea, loculis grosse 1-guttulatis, secundo supero crassiore, duobus extimis pallidioribus.

Hab. In ramis dejectis emortuis *Fagi obliquae*? in sylvis prope *Ushuvaia*, Maj. 1882.

236. Melanomma nigrisepta Speg. (n. sp.)

Diag. Perithecia sparsa ligno infuscato immersa v. basi tantum infossa, globuloso-compressa (400-600 μ), atra, glabra, crasse carbonacea, contextu indistincto opaco, ostiolo non v. vix papillulato latiusculo subumbilicato coronata; asci cylindracei, antice rotundati crassiuscule tunicati late 1-foveolati, postice plus minusve attenuato-pedicellati (150-200 × 14 μ), densiuscule paraphysati, 4-8-spori; sporidia recte monosticha elliptica elongata v. subfusoidea, utrinque obtusiuscule rotundata (30-40 × 10-12 μ), subcurvula v. leniter inaequilateralia, 7-9-septato-constricta, pallide fuliginea, septis crassis nigris opacis notata.

Hab. Ad ramos emortuos v. vivos *Escalloniae serratae* in *Staten island,* Mart. 1882.

Obs. Species habitu fungino sed ascorum sporarumque fabrica lichenina! Gonidia non visa! Iodi ope nulla.

237. Trematosphaeria ? lophiostomoides Speg. (n. sp.)

Diag. Perithecia ligno semiinfossa, cortice primo tecta, dein denudata, e lenticulari globosa, e latere compressa (200-250 μ), coriaceo-carbonacea, atra, glabra, contextu indistincto, ostiolo papillulato crasso obtuso compressiusculo ore rotundo facile deciduo, ac foramem latiusculum relinquente donata ; asci cylindracei v. cylindraceo-subclavati, sursum rotundati v. subtruncati crasse tunicati late 1-foveolati, deorsum crasse attenuato-pedicellati (85-95 × 10 μ), tunica iodi ope perdilute coerulescente, octospori, paraphysibus filiformibus simplicibus v. ramosis densiuscule obvallati ; sporidia elliptico-fusoidea, utrinque obtusiuscula (18-20 × 4-5 μ), primo 1-septato-constricta, loculis grosse 1-guttulatis ac medio subcoarctatis, hyalina, dein 3-septata, septo medio tantum valide constricta, pallide fuliginea, recta v. subcurvula.

Hab. Ad ramos dejectos putrescentes *Mayteni* in sylvis prope *Shammacus,* Maj. 1882.

238. Sporormia minima Awd. — Speg., Fung. pat. n. 135.

Hab. In fimo vaccino putrescente in pratis prope *Ushuvaia,* Maj. 1882.

239. Sporormia intermedia Awd.—Speg., Fung. pat. n. 139.

Hab. In fimo ovino et equino vetusto in pratis prope *Ushuvaia,* Maj. et Jun. 1882.

240. Sporormia ambigua Niessl. —Speg., Fung. pat. n. 136.

Hab. In fimo ovino et auchenino prope *Ushuvaia* et *Slogget bay,* Maj. et Jun. 1882.

241. Sporormia patagonica Speg. — Fung. pat. n. 140.
Hab. In stercore vetusto *Aucheniae guanaci* in herbosis prope *Slogget bay* et *Gertrude Cove*, Maj. et Jun. 1882.

242. Sporormia fuegiana Speg. (n. sp.)
Diag. Sporormiella; perithecia sparsa, immersa, globulosa (200-250 μ), atra, glabra, coriacella, contextu opaco indistincto, ostiolo papillulato non v. vix exerto areola pallescenti cincto donata; asci cylindracei, antice obtuse rotundati, postice abrupte coarctati (p. sp. 120-130 × 25 μ) ac in pedicello brevi gracili (10-12 × 3-5 μ) producti, octospori, paraphysibus parcis simplicibus obvallati; sporidia recte v. oblique disticha, cylindracea (50-55 × 10-12 μ), tetramera, articulis numquam secedentibus, opace fuliginea, muco destituta.
Hab. In fimo *Aucheniae guanaci* in sylvis prope *Slogget bay,* Jun. 1882.
Obs. Species *Sp. leptosphaerioidi* Speg. satis affinis sed certe distincta ac mox dignoscenda.

243. Sporormia grandispora Speg. — Sacc., Syll. II, p. 128.
Hab. In fimo anserino putrescente prope *Ushuvaia,* Maj. 1882.
Obs. Specimina fuegiana a typo nonnihil recedunt; ascis gracilioribus (180-200 × 20-25 μ) parce paraphysatis; sporidiis tenuiter hyalino-tunicatis (65 × 10-12 μ).

244. Sporormia megalospora Awd. — Sacc., Syll. II, p. 126.
Hab. Vulgata in fimo anatino et anserino prope *Ushuvaia* et *Wallamatu,* Maj. 1882.

245. Sporormia heptamera Awd. — Speg., Fung. pat. n. 143.
Hab. In fimo murino in sylvis prope *Ushuvaia,* Maj. 1882.
Obs. Specimina fuegiana ascis cylindraceis (200 × 30 μ)

aparaphysatis, sporidiis (65 × 13 μ) strato mucoso fere destitutis a typo recedunt.

246. Sporormia antarctica Speg. (n. sp.)

Diag. Eusporormia; perithecia sparsa v. laxe gregaria, rarius hinc inde 3-5-aggregata, immersa v. semiexerta, e conoideo globosa (350-450 μ), atra, glabra, contextu pellucido parenchymatico fuligineo, ostiolo papillulato crasso obtuso coronata; asci cylindraceo-clavati, antice truncato-rotundati, postice breviter crasseque attenuato-pedicellati (140-150 × 25-30 μ), octospori, paraphysibus paucis saepius mox evanescentibus inmixti; sporidia di-tri-sticha, utrinque obtusiuscula, longitudine varia (45-65 × 5-6 μ), 11-13-mera, articulis cuboideo-lenticularibus, facillime secedentibus, quarto v. quinto supero aliis crassiore (4-5 × 5-6 μ), extimo supero hemisphaerico, extimo infero conico (4 × 3 μ), opace fuliginea, strato mucoso hyalino plus minusve evoluto obovoluta.

Hab. In fimo *Berniclae antarcticae* in marittimis arenosis prope *Ushuvaia*, Jun. 1882.

247. Pleospora sphaerelloides Speg. (n. sp.)

Diag. Catharinia; maculae amphigenae indeterminatae superne canescentes inferne pallide roseo-aurantiae; perithecia inmersa laxe gregaria v. subseriata, atra, glabra, globulosa (170-200 μ), coriacella, contextu indistincto opaco, ostiolo vix papillulato epidermidem perforante sed non exerto donata; asci cylindracei v. cylindraceo subobovati (50-60 × 12-14 μ), antice late rotundati crasse tunicati 1-foveolati, postice abruptiuscule cuneato-pedicellati, octospori, aparaphysati; sporidia disticha obovato-subfusoidea, utrinque obtuse acutata (13-15 × 4-5 μ), 5-septata, loculis 1-v. saepius

2 centralibus, septo altero verticali divisis (rarissime deficiente), hyalina.

Hab. Ad folia vaginasque *Poae Forsteri* prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Species ob maculas pulchras carneo-aurantias superficem internam vaginarum latiuscule ambientes distinctissima.

248. Pleospora antarctica Speg. (n. sp.)

Diag. Perithecia matrice nigrificata immersa v. semiimmersa, epidermide velata e globoso conoidea (180-200 μ) atra glabra coriacella crassiuscula, contextu olivaceo parum distincto, ostiolo acutiusculo brevi coronata; asci cylindracei antice rotundato-subtruncati non v. vix crassiuscule tunicati non foveolati, postice brevissime crasseque attenuato-stipitati (80-90 × 10-14 μ), parcissime paraphysati, octospori, sporidia oblique monosticha v. recte disticha, elliptico-subfusoidea, utrinque acute obtusata (20-25 × 5-6 μ), inaequilateralia v. subcurvula, horizontaliter 7-(rarius 3-5-) septata, ad septa (medio validius) leniter constrictula, loculis 4 (rarius 8) internis septo altero verticali divisis, dilute olivacea, loculis extimis pallidioribus.

Hab. In culmis putrescentibus graminacearum prope *Shammacus*, Maj. 1882.

249. Pleospora freticola Speg. — Fung. pat. n. 147.

Hab. In scapo putrescente *Culcidii magellanici* prope *Wallamatu*, Maj. 1882.

250. Pleospora pentamera Karst. — Sacc., Syll. II, p. 266.

Hab. Non rara in foliis *Phlaei antarctici* et *Luzulae* prope *Ushuvaia*, Maj. 1882.

Obs. Sporidia elliptica v. ovoidea 4-septata (25 × 11 μ) constrictula utrinque obtusa pallidissime mellea.

251. Pleospora fuegiana Speg. (n. sp.)
Diag. Maculae nullae; perithecia sparsa v. subseriata, hypophylla, globulosa (180-200 μ), immersa, submembranacea, atra, contextu parenchymatico olivaceo, ostiolo non v. vix papillulato pertusa, glabra v. hyphis paucis ramosis intricatis (3-4 μ crass.) fuligineis laxe vestita; asci cylindracei, apice obtusiuscule rotundati tunica non v. vix incrassata, basi plus minusve attenuato-pedicellati (75-100 × 13-15 μ), octospori, paraphysibus crassis paucis nodulosis immixti; sporidia fusoidea, utrinque plus minusve acutata (24-26 × 5-6,5 μ), horizontaliter 5- (rarius 7-) septata, vix (ad medium validius) constrictula, loculo intimo supero tantum septo verticali (rarius deficiente) diviso, mellea v. pallide fuliginea, strato mucoso hyalino tenui obovoluta, in prima juventute saepe utrinque minute hyalino-apiculata.
Hab. In foliis dejectis *Poae Forsteri* in scopulosis prope *Chair island,* Maj. 1882.
Obs. Species pulchella partium fructificationis fabrica fere lophiostomacea, ostiolo tamen rotundo recedens.

252. Pleospora gallegensis Speg. — Fung. pat. n. 144.
Hab. In scapis et foliis *Sisyrinchii filifolii* in *Smock island,* Jun. 1882.
Obs. Specimina fuegiana a typo nonnihil recedunt, ascis magis persistentibus cylindraceis v. cylindraceo-obovatis (75 × 14 μ) apice obtuse rotundatis tunica non v. vix incrassata, basi cuneatis ac pedicello brevissimo crassoque suffultis, aparaphysatis; sporidiis distichis (20–25 × 5-9 μ), flavescentibus, horizontaliter 4-septatis, loculis 2 v. 3 (rarius 1 v. 0) septo altero verticali continuo divisis.

253. Pleospora herbarum (Pers.) Rabh. — Sacc., Syll. II, p. 247.

Hab. In petiolis ac scapibus *Hamadriadis* sp. in alpinis in *Staten island*, Mart. 1882.

Obs. Perithecia coriacea, immersa, glabra, lenticulari-globosa (300-350 μ), ostiolato-papillulata, contextu indistincto; asci cylindraceo-subclavulati, antice rotundato-subtruncati crasse tunicati breve lateque 1-foveolati, deorsum brevissime crasseque attenuato-pedicellati (110-130 × 25 μ), octospori, dense paraphysati; sporidia disticha, elliptico-ovoidea, utrinque obtusissime subacutata (25-28 × 10-11 μ), horizontaliter 7-septata, ad septum medium tantum constricta (parte supera crassiore), loculis septis 1 v. 2 verticalibus divisis, flavescentia, strato mucoso, crassissimo obovoluta. An species distincta?

Pleosporae pyrenomycetum omnium maxime confusae ac eorum monographia summopere necessaria!

254. Pleospora longispora Speg. (n. sp.)

Diag. Maculae nullae v. indeterminatae, fuscescentes; perithecia sparsa immersa globulosa (300-350 μ) atra glabra, contextu dense parenchymatico fusco-fuligineo, ostiolo papillulato conico exertulo donata; asci cylindraceo-clavati, antice rotundati crassiuscule tunicati non v. vix subfoveolati, deorsum attenuati brevissime crasseque stipitati (180-200 × 25 μ), octospori, paraphysibus filiformibus guttulatis densis obvallati; sporidia disticha, clavulata (40-45 × 13-15 μ), 6-septata, ad septa leniter constricta (ad medium validius), segmento supero crassiore atque obtusiore (biseptato), infero longiore graciliore, loculis (2 extimis exceptis) septis valde tenuioribus reticulatis, flavida.

Hab. Ad vaginas putrescentes *Hierochloae antarcticae* prope *Penguin rookery, Staten island,* Mart. 1882.

255. Pleospora magellanica Speg. — Fung. pat. n. 146.
Hab. Vulgata in foliis vaginisque emortuis *Azorellae trifurcatae* per totam *Fuegiam,* hiem. 1882.

256. Pleospora misera Speg. (n. sp.)
Diag. Perithecia sparsa, subsuperficialia, primo epidermide velata, dein nuda, lenticulari-hemisphaerica (200-250 μ) coriacella atra glabra, contextu parenchymatico fuligineo, ostiolo latiusculo impresso pertusa; asci cylindracei v. cylindraceo-subclavati (65-80 × 18-20 μ), antice rotundato-subtruncati crassiuscule tunicati non foveolati, octospori, aparaphysati; sporidia disticha elliptica, utrinque obtusiuscula (20-25 × 10 μ), horizontaliter 5 (rarius 4-) septata, loculis 2 internis septo altero verticali continuo divisis, recta v. leniter inaequilateralia, subfuliginea.
Hab. In scapibus emortuis putrescentibus *Osmorrhizae chilensis* prope *Iandagaia,* Maj. 1882.

257. Pleospora Forsteri Speg. (n. sp.)
Diag. Maculae nullae; perithecia innato-erumpentia, sparsa v. 2-3-seriata, globulosa, e latere compressiuscula (250-300 × 150-200 μ), subcarbonacea, contextu indistincto opaco, atra, glabra v. hyphis paucis repentibus tenuibus basi cincta, ostiolo papillulato minuto coronata; asci cylindraceo-subclavati, antice attenuato-truncati, postice cuneato-attenuati ac pedicello brevissimo crassissimoque suffulti (80 × 15 μ), octospori, parce paraphysati; sporidia oblique disticha, fusoidea v. fusoideo-subovata, utrinque attenuato-rotundata (24 × 8 μ) recta v. inaequilateralia, horizontaliter 5-septata, ad septa constrictula, loculis 2 (rarius 3) intimis septo verticali alternatim (non continuo) divisis, flava.
Hab. Ad folia culmosque *Festucae magellanicae* in *Staten island,* Mart. 1882.

258. Pleospora insularis Speg. (n. sp.)

Diag. Perithecia sparsa parenchymate immersa atra glabra, globulosa (150-180 μ), coriaceo-membranacea, contextu dense parenchymatico olivaceo, ostiolo vix papillulato donata; asci cylindracei v. cylindraceo-subclavati, apice rotundati crassiuscule tunicati minute 1-foveolati, deorsum non v. vix attenuati pedicello crasso brevissimo suffulti (80 × 15 μ), octospori, parce paraphysati; sporidia disticha, biconico-obovata, utrinque obtusiuscula (25-28 × 8 μ), horizontaliter crasse 7-septata, loculis omnibus (extimo infero excepto) septo verticali continuo divisis, diu hyalina, dein sordide pallideque mellea.

Hab. In culmis emortuis *Hierochloae antarcticae* in *Staten island,* Mart. 1882.

259. Pleospora scopulicola Speg. (n. sp.)

Diag. Maculae nullae; perithecia superficialia, epidermide velata e globoso lenticularia (300-350 μ), atra, glabra, coriacella, contextu indistincto opaco, ostiolo non v. vix papillulato donata; asci pauci (10-12) in quoque perithecio, subclavati antice rotundati, postice attenuati stipite crassiusculo breviusculo suffulti (120-130 × 30 μ), tunica undique (praecipue in parte supera) crassa donati, aparaphysati, octospori; sporidia disticha elliptico-obovata, utrinque latissime obtusata (30 × 14 μ), horizontaliter 7-septata, ad septa non v. vix constricta, loculis omnibus septis 1-3 verticalibus alternatim divisis, primo flava dein fuscescentia, muco destituta.

Hab. In caulibus emortuis *Drabae magellanicae* et *Perremondiae* spec. prope *Ushuvaia* et in *Aicina* insula, Maj. 1882.

260. Pyrenophora antarctica Speg. — Fung. pat. n. 148.

Hab. In foliis emortuis *Azorellae trifurcatae* in *Basket island*, Jun. 1882.

261. TEICHOSPORA ANTARCTICA Speg. (n. sp.)

Diag. Perithecia sparsa v. hinc inde pauci-gregaria, primo cortice tecta, eaque secedente nuda, subglobosa (350-400 μ), semiimmersa, atra, carbonacea, contextu indistincto, ostiolo papillulato minuto ornata; asci cylindracei antice rotundati v. rotundato-subtruncati, deorsum breviter attenuati ac in pedicello crassiusculo desinentes (200 × 16-18 μ), tunica ubique crassiuscula donata, octospori, paraphysibus parcis filiformibus immixti; sporidia oblique monosticha, elliptica v. elliptico-obovata, utrinque subacutata (25-28 × 12-15 μ), horizontaliter 7-8-septata, ad septa non v. lenissime constricta (ad medium saepe validius) loculis 3–5 septis 1-2-verticalibus alternatim divisis, opace fuliginea.

Hab. In ramis emortuis v. subvivis *Chiliotrichi amelloidis* in *Staten island,* Mart. 1882.

262. TEICHOSPORA FUEGIANA Speg. (n. sp.)

Diag. Perithecia sparsa, cortice innata, primo peridermio tecta, dein erumpentia v. nuda, globosa (200-250 μ), carbonacea, atra, glabra, contextu subindistincte parenchymatico olivaceo, ostiolo non v. obtusissime papillulato minuto ornata; asci cylindracei, mox fatiscentes; sporidia oblique monosticha, elliptica v. elliptico-ovoidea, utrinque rotundata (20-24 × 10 μ), horizontaliter 7-9-septata (ad septa numquam contricta), loculis 4-5 centralibus septo verticali continuo divisis, subopace fuliginea.

Hab. Vulgata in ramis emortuis *Empetri, Lebetanthi, Mygindae, Gaultheriae, Chiliotrichi* in *Ushuvaia,*

Agaia, *Slogget bay* et *Staten island* aest. et hiem. 1882.

263. Pleosphaeria fuegiana Speg. (n. sp.)

Diag. Perithecia sparsa v. laxe gregaria, ligno denudato insidentia, e globoso sphaeroidea (200-230 μ), carbonacea, atra, laxe puberula, sursum pilis sparsis acutis unicellularibus opacis (10-20 × 2-3 μ) basi non v. vix incrassatis, deorsum hyphis fuligineis gracilibus septulatis repentibus intricatis vestita, contextu indistincto opaco, ostiolo impresso v. vix papillulato minutissimo ornata; asci cylindracei, antice truncato-rotundati crassiuscule tunicati, postice brevissime crasseque attenuato-pedicellati (85-95 × 7-8 μ), octospori, paraphysati; sporidia monosticha, elliptico-ovoidea v. subbiconica, utrinque acutiuscule rotundata (12 × 5 μ), non v. leniter inaequilateralia, horizontaliter 5-septata, constrictula, loculis 4 internis (rarius 1 v. 0) septo saepius continuo verticali divisis, locellis semper grosse 1-guttulatis, pallide e griseo olivacea.

Hab. In ramis decorticatis putrescentibus *Berberidis ilicifoliae* non rara hinc inde per *Fuegiam* totam, hiem. 1882.

264. Rhamphoria antarctica Speg. (n. sp.)

Diag. Perithecia saepius densiuscule gregaria, subseriata, ligno insculpta, cortice tecta, per rimas erumpentia, globosa (200-250 μ), atra, glabra, membranacea, contextu parenchymatico olivaceo, ostiolo setaceo rigidulo longissimo tenuissimoque (0,5-2‴ long. × 80 μ crass.) carbonaceo cylindraceo sursum attenuato apice non v. vix incrassatulo ac obtusato ornata; asci cylindracei, antice late rotundati, deorsum subcoarctati, ac stipite brevi crasso noduloso suffulti (80 × 18 μ), tunica ubique crassissima donati, aparaphysati, octo-

spori; sporidia oblique disticha elliptica v. subovoidea, utrinque obtusiuscula (18-20 × 10 μ), horizontaliter 3-septata, ad septum medium constricta, loculis 1 v. 2 internis septo altero verticali (rarius deficiente) continuo divisis, pallide olivacea.

Hab. In ramulis emortuis *Escalloniae serratae* vulgatissima in *Staten island* et *Fuegia,* aest. et hiem. 1882.

265. Cucurbitaria? antarctica Speg. (n. sp.)

Diag. Perithecia coespitose e rimulis peridermii erumpentia, acervulos transverse ellipticos pulvinato-fragariaeformes majusculos (2–5‴ diam. × 1-2‴ lat. × 1‴ crass.) efformantia, globoso-obovata superne applanato subumbilicata ac ostiolo minuto papillaeformi ornata, atra, glabra, coriacea, contextu indistincto. Asci ....?; sporidia ....? non visa.

Hab. Vulgatissima sed semper sterilis ad ramos dejectos *Fagi betuloidis* in *Staten island* et *Fuegia,* aest. et hiem. 1882.

266. Ophiobolus antarcticus Speg. (n. sp.)

Diag. Ophiognomonia; maculae nullae; perithecia hypophylla, sparsa v. laxe gregaria, e globoso conoidea, epidermide velata, prominula (120-150 μ), atra, glabra, coriacella, contextu parenchymatico atro-fuligineo, ostiolo conoideo parvulo carbonaceo instructa; asci cylindraceo-obclavati, sursum attenuati, apice rotundati, crasse tunicati ac minute 1-foveolati, basi attenuato-rotundati ac pedicello brevissimo crassoque suffulti (75-85 × 4-5 μ), paraphysibus paucis crassiusculis guttulatis immixti, octospori; sporidia filiformia fasciculata, ascorum longitudine, tenuissima ($^3/_4$ μ crass.), hyalina, indistincte guttulata.

Hab. Ad folia emortua dejecta *Fagi obliquae* ubique

non rara in sylvis per *Fuegiam* totam, hiem. 1882.

HYPOCREACEAE DNtrs.

267. Selinia antarctica Speg. — Fung. pat. n. 151.
Hab. Non rara in stercore vetusto *Aucheniae guanaci* in *Slogget bay*, Jun. 1882.

268. Selinia intermedia Speg. (n. sp.)
Diag. Perithecia saepius-3-5-aggregata, stromate ceraceo-carnosulo pallide rufescente in matrice tuberculoso-prominulo immersa, globulosa, (0,7-1‴ diam.), sicca rufescentia, uda flavescenti-mellea, ostiolo crasse obtuseque papillulato fuligineo coronata, contextu carnosulo indistincto subopaco rufescenti-ferrugineo; asci saccato-clavati (150-160 × 50 μ) subtorulosi, antice rotundati, postice brevissime crasseque attenuato-pedicellati, tenui tunicati, octospori, aparaphysati; sporidia di-tri-sticha, elliptica, utrinque acutiuscule rotundata (45-50 × 20-25 μ), crasse tunicata, laevia, hyalina.
Hab. In fimo vaccino vetusto putrescente in sylvis prope *Ushuvaia*, Maj. 1882.

269. Melanospora antarctica Speg. (n. sp.)
Diag. Perithecia sparsa v. hinc inde dense aggregata, globulosa (200-250 μ), plus minusve tenui membranacea, contextu subindistincto parenchymatico melleo, subiculo e roseolo sulfureo plus minusve effuso ex hyphis hyalinis continuis (3-6 μ crass.) dense ramoso intricatis composito vestita, ostiolo praelongo crassiusculo (0,5-1‴ long. × 90-100 μ crass.) membranaceo prosenchymatico cylindraceo apice obtuso et papilloso recto donata; asci mox fatiscentes cylindra-

cei?; sporae monostichae, ellipticae v. globoso-ellipticae, e latere compressae (9-12 $\times$ 6-8 $\times$ 3-4 μ) utrinque obtuse rotundatae (an prima aetate inferne minute hyalino appendiculatae?), opace fuligineae.

Hab. In ramis dejectis putrescentibus Fagorum prope *Ushuvaia* et *Agaia*, Jun. 1882.

Obs. Species subiculo flavo mox dignoscenda, quandoque corticola sparsa superficialia, quandoque dense constipata tuberculoso-erumpens v. tecta in sphaeriaceis parasitans. Perithecia pellucida ac mellea ob sporas inclusas saepius nigra apparent.

270. Charonectria australis Speg. (n. sp.)

Diag. Perithecia sparsa v. vix hinc inde 2-3-subgregaria, immersa, epidermide velata vix prominula, globulosa (250-300 μ), carnosulo membranacea mellea grabra, contextu dense parenchymatico fulvello, ostiolo vix papillulato obtuso crasso coronata; asci late clavati, antice obtuse rotundati v. subtruncati crasse tunicati postice in pedicello breviusculo ac crasso producti (p. sp. 110-120 $\times$ 30 μ — ped. 20-25 $\times$ 8-10 μ), octospori, paraphysibus filiformibus guttulatis mucosis aegre visibilibus obvallati; sporidia di-tri-sticha, cylindracea v. cylindraceo subfusoidea, utrinque obtusiuscula (75-80 $\times$ 12 μ), recta v. leniter sigmoidea, medio 1-septata constrictula, nubiloso-farcta, hyalina, strato mucoso tenui obovoluta.

Hab. In culmis emortuis putrescentibus *Rosthkoviae grandiflorae* in *Staten island* et prope *Ushuvaia,* Mart. et Maj. 1882.

Obs. Perithecia per aetatem decidua ac matricem punctato-alveolatam relinquentia.

271. Nectria lichenicola (Ces.) Sacc. — Syll. II, p. 498.

Hab. Non rara in thallo *Peltigerae* cujusdam in are-

nosis marittimis prope *Ushuvaia* et *Iandagaia,* Maj. 1882.

272. Nectria episphaeria (Tod.) Fr. — Sacc., Syll. II, p. 497.

Hab. In *Calosphaeria antarctica* Speg. ad ramos fagineos dejectos prope *Agaia,* Jun. 1882.

Obs. Vix a typo recedit; perithecia ovata apice subtruncata disco umbilicato; asci cylindracei (50-55 × 4-5 μ) apice truncati, aparaphysati; sporidia monosticha elliptica (7-8 × 4-4,5 μ) utrinque obtusa.

273. Nectria insularis Speg. (n. sp.)

Diag. Perithecia coespitosa, conferta, stromate pulvinulato, erumpente, applanato v. hemisphaerico (2-5‴ diam.), carnosulo insidentia, pallescenti-rubra v. subcoccinea, globosa (250-300 μ), laevia, glabra, membranaceo-carnosula, contextu densissime parenchymatico subindistincto, ostiolo minuto non v. vix papillulato saepius fuscescente instructa; asci cylindracei v. subfusoideo-cylindracei, sursum attenuati apice truncato-rotundati crassiuscule tunicati late pervii, deorsum longiuscule crasseque attenuato-pedicellati (85-95 × 7-8 μ), octospori, aparaphysati; sporidia oblique monosticha (rarius apice subdisticha) elliptico-biconica, utrinque acutiuscule rotundata (18-20 × 5-8 μ), medio 1-septata non v. leniter constricta, dense minuteque papilluloso-asperula, loculis non v. grosse 2-guttulatis, hyalina.

Hab. Ad ramos emortuos *Berberidis ilicifoliae* prope *Pactolus cove* in *Staten island,* Mart. 1882.

274. Hypocrea rufa (Pers.) Fr. — Sacc., Syll. II, p. 520.

Hab. In trunco fagineo emortuo putrescente prope *Gertrude cove,* Jun. 1882.

Obs. Specimen nonnihil obliteratum ac substerile!

275. Pleonectria antarctica Speg. (n. sp.)

Diag. Coespituli applanati v. hemisphaerici, majusculi (2-3‴) 20-40 peritheciigeri, sparse erumpentes; perithecia globosa v. obovata (300-350 μ), coccinea, glabra, laevia, carnosula, contextu dense parenchymatico rubro, ostiolo minuto acuto vix papillulato saepius fuscescente instructa; asci fusoidei, sursum attenuati, apice truncati crasse tunicati minute 1-foveolati, deorsum cuneati ac in stipite brevi crassoque producti (80-100 × 15-20 μ), octospori, aparaphysati; sporidia di-tri-sticha, elliptica v. ovoidea, utrinque obtusissima (20-27 × 8-10 μ), recta v. vix inaequilateralia, horizontaliter 7-(rarius 5-) septata, ad septa non constricta, loculis omnibus septis 2 verticalibus divisis, locellis cribrose guttulatis, hyalina.

Hab. Ad ramos *Berberidis ilicifoliae* emortuos prope *Pactolus cove* in *Staten island,* Mart. 1882.

276. Pleonectria vagans Speg. (n. sp.)

Diag. Coespituli vix pulvinulato-erumpentes, minuti (1‴diam.) 3-9-peritheciigeri, sparsi; perithecia globoso-obovata (250-300 μ) sordide rubra v. subtestacea, saepe pruinula stromatica tecta, membranaceo-carnosula, contextu plus minusve distincte parenchymatico rubro-aurantio, ostiolo vix papillulato fuscidulo donata; asci subclavati, antice truncati crassiusculeque tunicati, postice modice attenuato pedicellati (p. sp. 90-100 × 18-20 μ — ped. 20-30 × 5 μ), octospori, aparaphysati; sporidia oblique disticha, elliptico-elongata, utrinque plus minusve acutato-rotundata (28-35 × 10-12 μ) horizontaliter 7-9-septata non constricta (rarius vix ad medium), loculis 3-6 internis, septo altero vertical

continuo divisis, locellis non v. grosse 1-guttulatis, saepius leniter curvula, hyalina.

Hab. Vulgata ad ramos dejectos *Fagi betuloidis, F. antarcticae, Mayteni magellanicae, Drymidis Winteri* in *Staten island* et in *Fuegia,* aest. et hiem. 1882.

DOTHIDEACEAE Nitz. et Fuck.

277. PHYLLACHORA GRAMINIS (Pers.) Fuck. — Sacc., Syll. II, p. 602.

Hab. In foliis languidis *Poae* cujusdam prope *Ushuvaia,* Jun. 1882.

Obs. A typo vix recedit sporis nonnihil inaequilateralibus (11-13 × 4 μ) dilutissime fuscescentibus.

278. DOTHIDEA? ANTARCTICA Speg. (n. sp.)

Diag. Maculae epiphyllae, parvulae, indeterminatae, fuscescentes; stromata hypophylla, sparsa, innata, suborbicularia (2-3‴ diam.) vix pulvinulata applanata atra glabra non v. vix nitentia; loculi densissime constipati, globulosi (100-120 μ) e mutua pressione saepe angulosi; asci et sporidia non visa!

Hab. Vulgata ad folia viva v. languida *Mayteni magellanicae* in sylvis prope *Shammacus* et *Picton island,* Maj. 1882.

DARWINIELLA Speg. (n. gen.)

Diag. Stromata *Dothideae* Fr. loculis immersis non prominulis; asci cylindracei v. clavati octospori paraphysati; sporidia elongata 3-septata hyalina.

279. DARWINIELLA ANTARCTICA Speg. (n. sp.)

Diag. Stromata corticola, primo tecta dein erumpentia ac peridermii laciniis cincta, parvula (1-1,5''' diam.), atra, opaca, laevia, parum pulvinata sparsa v. gregaria ac subseriato-subconfluentia, carbonacea, contextu indistincto; loculi globulosi dense constipati (200-250 μ), immersi non prominuli; asci cylindracei v. cylindraceo-fusoidei, apice truncati, postice attenuato-pedicellati (80-100 × 8-9 μ), octospori, paraphysibus filiformibus paucis obvallati; sporidia oblique mono-v. di-sticha subcylindracea, utrinque obtusiuscule rotundata (15-25 × 4-5 μ) leniter inaequilateralia v. subcurvula, triseptata, ad septa non constricta, hyalina.

Hab. Ad ramos dejectos emortuos *Chiliotrichi amelloidis* prope *Port Cook* in *Staten island*, Mart. 1882.

MICROTHYRIACEAE Sacc.

280. Microthyrium antarcticum Speg. (n. sp.)

Diag. Perithecia atra, hypophylla sparsa superficialia, orbiculari-scutata (100-110 μ), membranacea subcoriacella, contextu dense prosenchymatico-radiante, circa ostiolum (15 μ diam.) subcarbonacea, margine fimbriatula; asci cylindracei v. cylindraceo-obclavati, antice obtusi rotundati crassiuscule tunicati minute 1-foveolati, postice rotundato-cuneati in pedicello brevissimo ac minuto producti (22-27 × 3,5-4,5 μ), octospori, aparaphysati; sporidia recte disticha, obovato-elongata, utrinque obtusiuscule rotundata (6,5-7 × 1,5-2 μ), recta v. vix subinaequilateralia, 1-septata leniter constricta, loculis minute 2-guttulatis, supero crassiore brevioreque, hyalina.

Hab. Ad folia dejecta *Berberidis ilicifoliae* et *Callixenis marginatae* in *Staten island*, Mart. 1882.

281. Microthyrium? fuegianum Speg. (n. sp.)

Diag. Perithecia sparsa, superficialia, atra, scutato-orbicularia (120-130 μ), tenui membranacea, contextu dilute fuligineo laxe prosenchymatico-reticulato margine non v. vix denticulata, ostiolo impresso lato (30 μ diam.) pertusa; asci obclavati, apice truncati crasseque tunicati, postice rotundati in pedicello brevissimo crassoque producti (30-35 × 6-8 μ), octospori, aparaphysati; sporidia di-tri-sticha, elliptica v. subovato-elongata, utrinque subtruncata (10 × 3 μ) medio 1-septata, constrictula, loculis subaequalibus, primo grosse 2-guttulatis, hyalina, postremo triseptata.

Hab. Ad culmos dejectos emortuos *Rosthkoviae grandiflorae* in *Staten island,* Mart. 1882.

Obs. Species pulcherrima ob sporas triseptatas novi generis typum sistens.

282. Seynesia australis Speg. (n. sp.)

Diag. Maculae orbiculares (2-3‴) epiphyllae albescenti-cinereae v. fuscescentes determinatae linea prominula obscuriore limitatae; perithecia in macularum centro laxe gregaria, innato-superficialia, scutato-orbicularia (75-80 μ), atra, glabra, subcoriacella, contextu dense parenchymatico fusco-atro subimperspicuo, ostiolo minuto impresso (5-6 μ diam.) pertusa; asci obovati v. pyriformes, ubique crassissime tunicati, basi in pedicello brevi crassoque desinentes (25-30 × 10-15 μ), 4-6-8-spori, mox diffluentes, aparaphysati; sporidia opace fuliginea (13-14 × 6-7 μ) excentrice septata, constricta, loculo supero obovato majusculo, infero subgloboso duplo minore.

Hab. Ad folia viva v. languida *Drymidis Winteri* in *Staten island*, Mart. 1882.

Obs. Species pulchella ob sporarum formam facile novi generi typum sistens; cum *Asterina compacta* Lév.

(secumdum Cl. Montagne in Gay, Fl. Chil. v. VII, p. 474) sporis 4-locularibus donata non comparanda; cnfrt etiam Winter, Pilze v. Chile n. 13 !

283. Morenoella antarctica Speg. (n. sp.)

Diag. Perithecia sparsa, minuta (0,5-1,5‴ long. × 0,2-0,3‴ lat.) simplicia v. subramulosa, utrinque acutiuscule rotundata, recta v. subflexuosa, atra, superficialia, scutato-dimidiata, tenui membranacea, contextu densiuscule prosenchymatico-radiante margine denticulato-subfimbriatulo pellucido fuligineo, ostiolo rimoso per totam longitudinem percursa; asci ovati v. obovati, antice late truncato-rotundati crassissimeque tunicati (26-27 × 13-14 μ), basi pedicello brevissimo crasso suffulti, octospori, aparaphysati; sporidia conglobata, elliptico-clavulata (10 × 3 μ), recta, medio 1-septata non contricta, loculo supero crassiore acutiuscule rotundato, infero subcylindraceo gracili rotundato–subtruncato, primo hyalina dein fusco-subfuliginea; an prima aetate strato mucoso tenui obovoluta?

Hab. In culmis emortuis putrescentibus *Rosthkoviae grandiflorae* in *Staten island* et *Fuegia* non rara, aest. et hiem. 1882.

284. Morenoella australis Speg. (n. sp.)

Diag. Perithecia sparsa, minuta (0,5-1‴ long. × 0,1-0,15‴ lat.), simplicia v. subramulosa, utrinque obtusiuscula, recta v. flexuosula, atra, superficialia, dimidiata, scutato-adfixa, tenui membranacea, contextu densiuscule prosenchymatico–radiante margine vix denticulato pellucido fuligineo, ostiolo rimoso percursa; asci subglobosi v. ovati, apice truncato-rotundati, basi stipite brevissimo, crassissimoque suffulti (14-16 × 10-12 μ), 4-6-8-spori, aparaphysati; sporidia elliptico-clavulata, recta v. inaequilateralia (6-8 × 2,5-3 μ), medio 1-sep-

tata, non constricta, loculo supero conoideo vertice obtuse rotundato, infero subcylindraceo rotundato, primo hyalina dein fuscescentia.

Hab. In foliis vaginisque putrescentibus *Poae Forsteri* in *Staten island*, Mart. 1882.

Obs. In utraque specie labiis rimae ostiolaris tenuibus, acute conniventibus, per aetatem non v. vix apertis, saepius frustulatim lacero-dehiscentibus.

LOPHIOSTOMACEAE Sacc.

285. Lophiotrema fuegianum Speg. (n. sp.)

Diag. Perithecia primo cortice tecta, dein nuda, late densissimeque superficialia, vix basi insculpta, globulosa (200-300 μ), carbonacea, atra, glabra, ostiolo parvulo conoideo apice compresso donata; asci cylindracei, apice obtuse rotundati crassiusculeque tunicati, basi breviter attenuato-pedicellati (120 × 8-10 μ), octospori, parce paraphysati; sporidia oblique monosticha, cylindraceo-fusoidea, utrinque attenuato-rotundata (26-32 × 6 μ), recta v. subcurvula, 7-septata, ad septum medium tantum constricta, hyalina.

Hab. Ad ramulos emortuos dejectos *Pernettiae mucronatae* in *Slogget bay*, Jun. 1882.

286. Lophiotrema antarcticum Speg. (n. sp.)

Diag. Perithecia ligno denudato immersa e globoso-compressa, majuscula (1‴ × 500-800 μ), carbonacea, atra, ostiolo longiusculo exerto compresso acie acuto integro donata; asci cylindraceo-subclavati, sursum truncato-rotundati crassiusculeque tunicati 1-foveolati, deorsum brevissime crasseque attenuato-stipitati (150-200 × 16-20 μ), octospori, parce paraphysati; sporidia recte disticha, fusoidea, utrinque acutissima (45-52 × 7-8 μ),

recta v. subinaequilateralia, 9-11-septata (in juventute torulosa) non constricta, hyalina.

Hab. In ramis dejectis putrescentibus *Chiliotrichi amelloidis* in *Staten island*, Mart. 1882.

287. Lophiotrema antarcticum Speg.
var. *pingue*

Diag. Perithecia ut in typo; asci clavati, sursum rotundati, deorsum plus minusve longe attenuati (130-150 × 20 μ), 2-8-spori, dense paraphysati; sporidia fusoidea, recta, 9-septata (40-60 × 10-12 μ) non constricta, hyalina.

Hab. In ramis *Pernettiae mucronatae* emortuis in *Port Tom, Skyring island*, Jun. 1882.

288. Lophiotrema auctum Sacc. — Syll. II, p. 688.

Hab. In ramulis *Escalloniae serratae* in *Fiord Negri* sub *M. Sarmiento*, Maj. 1882.

Obs. Asci subcylindracei, apice rotundati crassiuscule tunicati minute 1-foveolati, basi brevissime attenuato-pedicellati (110-135 × 10-12 μ), paraphysati; sporidia oblique mono- v. di-sticha, fusoidea, utrinque acutiuscula (40 × 8 μ), curvula, 7-septato-constricta, subtorulosa, primo hyalina dein fuscidula, strato mucoso tenuissimo utrinque in caudis conicis acutis (8-10 μ long.) producto donata.

289. Lophiotrema australe Speg. (n. sp.)

Diag. Vivianella; perithecia ligno denudato infuscatoque insidentia, sparsa v. hinc inde 2-5-gregaria, semiimmersa, globuloso-compressa (500-600 μ), atra, glabra, carbonacea, ostiolo brevi papillulato rimoso acie acuto integro donata; asci subclavati, antice obtusiuscule rotundati crassiusculeque tunicati, deorsum in pedicello breviusculo atque crassiusculo desinentes, (120-130 ×

20 μ), octospori, dense paraphysati; sporidia oblique v. recte disticha, fusoideo-subclavulata, utrinque acutiuscule rotundata (30-40 × 10 μ), leniter curvula, 7-8-septata ad septa constrictula, loculo quarto supero saepius nonnihil crassiore, hyalina, strato mucoso tenui utrinque in rostello subconico (7-8 μ long.) producto donata.

Hab. In ramulis emortuis *Chiliotrichi amelloidis* in *Staten island,* Mart. 1882.

290. Lophiotrema magellanicum Speg. (n. sp.)

Diag. Vivianella; perithecia dense sparsa, ligno immersa v. semiimmersa, globulosa (300-350 μ), atra, carbonacea, ostiolo compresso acuto integro coronata; asci cylindracei v. subclavati, antice rotundati crassiusculeque tunicati late minuteque foveolati, postice attenuato-pedicellati, (110-120 × 10-12 μ), dense paraphysati, octospori; sporidia oblique v. recte disticha, subfusoidea, utrinque obtusiuscula (25-28 × 6,5-7 μ), curvula, 5-7-septato-constricta, loculis grosse 1-guttulatis, hyalina, strato mucoso utrinque in cauda conica (5-7 μ long.) producto donata.

Hab. In ramulis emortuis *Philesiae buxifoliae*, *Fuchsiae magellanicae* et *Chiliotrichi amelloidis* non rara in *Staten island* et hinc inde in *Fuegia,* aest. et hiem. 1882.

291. Lophiostoma fuegianum Speg. (n. sp.)

Diag. Perithecia matrice nigrificata semiimmersa, sparsa, globulosa (180-200 μ), ostiolo papillulato hysterioideo crenulato coronata, atra, glabra, carbonacea; asci clavati, antice obtusati postice attenuato-pedicellati (p. sp. 55-60 × 12-15 μ), crassiuscule tunicati, diffluentes, densiuscule paraphysati; sporidia di-tri-sticha, fusoideo-clavulata (20-25 × 4-5 μ), recta v. vix inaequilateralia,

5-septata, ad septa non v. vix constricta (ad medium validius), loculo quarto supero saepius nonnihil crassiore, supremo obtuso, infimo acuto conico longiusculo, fuliginea, in segmento supero obscuriora.

Hab. Ad culmos emortuos putrescentes *Triseti* sp. in sabulosis prope *Punta anegada*, Jul. 1882.

292. Lophidium compressum (Pers.) Sacc. — Syll. II, p. 711.

Hab. Ad ramulos emortuos putrescentes *Empetri rubri* et *Mayteni magellanicae* non rarum hinc inde in *Staten island* et *Fuegia*, aest. et hiem. 1882.

Obs. Sporidia elliptico-subovata v. subfusoidea, utrinque plus minusve acutiuscule rotundata (20 × 9 μ), recta v. inaequilateralia, horizontaliter 5-(rarius 7-) septata, ad septa constrictula, loculis 1-6 mediis septo altero longitudinali continuo divisis, fuliginea.

293. Lophidium melanommoide Speg. (n. sp.)

Diag. Perithecia matrice infuscata dense gregaria, subsuperficialia v. semiimmersa, globulosa (350-400 μ), atra, subrugulosa carbonacea, ostiolo minuto papillulato compresso coronata; asci cylindracei, apice truncato-rotundati crassimeque tunicati, basi breviter attenuato-pedicellati (80-85 × 12-15 μ), dense paraphysati, octospori, tunica iodi ope dilutissime coerulescente; sporidia oblique monosticha, elliptica v. elliptico-biconica, utrinque obtusiuscule rotundata (16-25 × 7-10 μ), recta v. curvula, horizontaliter 3-7-septata, non v. parce constricta, segmento supero obtuso, infero saepius acutiore, loculis 1-5 (rarissime 0) internis v. externis, septo altero quandoque continuo quandoque interrupto v. obliquo divisis, fuliginea, polis pallidioribus.

Hab. In ramulis dejectis putrescentibus *Escalloniae serratae* prope *Penguin rookery* in *Staten island*, Febr. 1882.

HYSTERIACEAE Cda.

294. Lembosia drymidis Lév. — Winter, Pilz. v. Chile, n. 13.

Hab. Vulgata ad folia viva v. languida *Drymidis Winteri* in *Staten island*, Mart. 1882.

Obs. Maculae epiphyllae, orbiculares (3-5‴ diam.), determinatae, subpulvinulatae, nigrae v. fuscescentes, zona marginali canescente saepe donatae; perithecia in maculis superficialia, laxe gregaria, subiculo fibroso mucedineo-membranaceo tenui subfatiscente fuligineo insidentia, elliptica v. subtrigona, simplicia v. subramulosa (200-300 μ. long. × 80-150 μ. lat.), inferne applanata, clausa, superne rotundata, rimula impressula percursa, atra glabra, subcarbonacea, contextu indistincto opaco; asci obovati, superne latiuscule rotundati crasse tunicati, inferne cuneati in pedicello brevissimo crassoque producti (28-35 × 15-20 μ), subfluxiles, octospori, aparaphysati; sporidia conglobata, elliptica, utrinque rotundata (15-18 × 7-8 μ), medio 1-septata, leniter constricta, non v. vix subinaequilateralia, primo hyalina dein dilute fuliginea.

295. Hysterium fructicum Sacc.—Syll. II, p. 745.

Hab. In ramis languidis *Empetri rubri* rarissime prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Sporidia triseptata leniter constricta (25-26 × 5-6 μ), primo hyalina dein pallide fuliginea.

296. Gloniella australis Speg. (n. sp.)

Diag. Perithecia matrice dealbata innato-superficialia, linearia (0,5-1‴ long. × 200 μ. lat. × 200 μ. crass.), parum elevata, recta v. vix flexuosula, utrinque acuta,

atra glabra laevia opaca carbonacea, labiis obtusiusculis conniventibus v. apertis donata; asci cylindraceo-subclavati, sursum obtuse rotundati crassissime tunicati, deorsum attenuati breviter crasseque pedicellati (60 × 12 μ), octospori, dense paraphysati; sporidia recte v. oblique disticha, elliptico-elongata, utrinque obtusiuscula (18-20 × 6 μ), recta v. vix subinaequilateralia, 5-septata, non constricta, loculo quarto supero non v. vix crassiore, hyalina, per aetatem perdilute fuscescentia.

Hab. In trunco fagineo emortuo fluitato in *Slogget bay,* Jun. 1882.

297. Gloniella australis Speg.
var. *minor.*

Diag. Perithecia matrice dealbata, sparsa, superficialia, elliptico-linearia (500‴ long. × 200-250 μ lat.) atra carbonacea laevia glabra; asci cylindracei v. cylindraceo-obclavati, sursum truncato-rotundati crasse tunicati, deorsum subrotundati ac pedicello brevissimo crassoque suffulti (45-50 × 14-18 μ), octospori, parce paraphysati; sporidia subconglobata, elliptico-elongata, utrinque obtusiuscula (18-20 × 4-5 μ), 5-septata, ad septa non constricta, hyalina.

Hab. In trunco fagineo emortuo decorticato induratoque prope *Port S. John* in *Staten island,* Mart. 1882.

298. Gloniella multiseptata Speg. (n. sp.)

Diag. Perithecia matrice non v. vix infuscata, erumpenti-superficialia, saepius aggregata, linearia, recta v. flexuosa, utrinque acutiuscula (500-1000 μ long. × 250 μ lat.), depressula, atra laevia carbonacea, labiis obtuse rotundatis conniventibus v. vix apertis donata; asci cylindraceo-obovati, apice late truncato-rotundati crassissime tunicati, basi rotundati subcoarctati brevissme crasseque stipitati (50-60 × 15-18 μ), paraphysibus

hyalinis apice coalescentibus fuscescentibusque dense obvallati, octospori; sporidia oblique disticha, ovato-elongata, utrinque acutiuscule rotundata (22-25 × 8-10 μ), leniter inaequilateralia, 7-9-septata, ad septum medium tantum leniter constricta, hyalina.

Hab. In rimis ramorum putrescentium *Pernettiae mucronatae* in *Burnt island*, Maj. 1882.

299. Gloniella antarctica Speg. (n. sp.)

Diag. Maculae cinerascenti-pallescentes, indeterminatae, epiphyllae; perithecia maculis insidentia, laxe gregaria v. sparsa, superficialia, linearia, utrinque obtusiuscula (500-600 μ long. × 200 μ lat. × 150 μ crass.), labiis obtuse rotundatis laxe conniventibus donata, atra glabra laevia opaca; asci obovati, antice latissime subtruncato-rotundati crassissime tunicati, deorsum subcuneati ac in stipite brevissimo crassoque producti (32-35 × 15 μ), octospori, dense paraphysati; sporidia inordinate constipata, elliptica v. subfusoidea, utrinque plus minusve acutata (14-15 × 5-7 μ), crassissime tunicata, 6-8-blasta, hyalina.

Hab. Vulgata ad folia emortua *Grammitis magellanicae* in *Staten island* et in *Fuegia*, aest. et hiem. 1882.

Obs. Species habitu ac sporarum fabrica lichenina, thallo tamen deficiente ac iodi ope nulla!

300. Hysterographium fuegianum Speg. (n. sp.)

Diag. Perithecia plus minusve dense gregaria, parallela, superficialia, elliptico-linearia (1000 long. × 300-350 lat. × 450-500 μ crass.), elevata, utrinque obtusiuscula non v. vix subcoarctatula, atra glabra laevia, labiis obtuse rotundatis conniventibus ornata; asci cylindraceo-subclavati, ubique crasse tunicati, antice obtuse rotundati, postice in pedicello brevissimo crassoque desinentes (100-110 × 20 μ), octospori, paraphysibus densis

subcoalescentibus obvallati; sporidia disticha, elliptico-biconica, utrinque acute rotundata (38-45 × 12-15 μ), horizontaliter 10-11-septata, ad septa lenissime (ad medium saepe validius) constrictula, loculis septis 1-3 alternatim divisis, subopace fuliginea.

Hab. Ad ramulos emortuos decorticatos *Escalloniae serratae* prope *Penguin rookery* in *Staten island*, Mart. 1882.

301. Hysterographium magellanicum Speg. (n. sp.)

Diag. Perithecia laxe inordinateque aggregata, scaphoidea, majuscula (0,5-2‴ long. × 0,3-0,5‴ crass.), utrinque acutiuscula, basi coarctatula, superne rotundata, labiis subacute ac arcte conniventibus (rima tandem parum perspicua) donata glabra laevia atra carbonacea; asci cylindracei, subtenui tunicati saepeque subtorulosi, antice rotundati, postice breviuscule attenuato-pedicellati (160-180 × 25 μ), dense paraphysati, octospori; sporidia oblique monosticha v. recte disticha, elliptico-ovoidea, medium tantum constricta, saepius obtusissima (50-55 × 18 μ), primo pellucida, horizontaliter 11-septata, loculis septis 1-3 verticalibus divisis, locellis guttulatis, dein opaca, atro-fuliginea.

Hab. Ad corticem *Fagorum* viventium non rara hinc inde in sylvis per *Fuegiam*, hiem. 1882.

Obs. Speciem simillimam nisi identicam etiam in *Cabo negro* (Patagonia) inveni, sed specimina amisi.

302. Hypoderma brachysporum Speg. (n. sp.)

Diag. Maculae nullae; perithecia amphigena, hinc inde laxe inordinateque aggregata, innato-superficialia, elliptica, utrinque obtusiuscula (1‴ long. × 0,5‴ lat.), atra glabra laevia coriaceo-subcarbonacea, contextu indistincto, rimula latiuscule hiante percursa, labiis acutis

intus fuscescentibus donata; asci clavati, sursum attenuati, apice truncati, deorsum longe attenuato-pedicellati (p. sp. 40 × 10 μ — p. 30-40 × 3 μ) octospori, paraphysibus filiformibus paucis longioribus apice flexuosis v. subcirrhatis obvallati; sporidia cylindracea, utrinque obtusiuscule rotundata (12-13 × 3 μ), curvula, continua, hyalina.

Hab. Ad folia dejecta putrescentia *Berberidis ilicifoliae* in *Staten island* et in *Fuegia* non rara, aest. et hiem. 1882.

303. Hypoderma virgultorum DC. — Sacc., Syll. II, p. 786.

Hab. In ramulis dejectis putrescentibus *Veronicae decussatae* ad *Port Vancouver* in *Staten island.* Mart. 1882.

Obs. Asci clavati (100-110 × 8-9 μ), sursum acutato-rotundati, deorsum longe attenuato-stipitati, paraphysibus filiformibus rectis obvallati; sporidia suballanthoidea, utrinque obtusa (20-24 × 3-3,5 μ), hyalina.

304. Lophodermium antarcticum Speg. (n. sp.)

Diag. Maculae pallescentes latae indeterminatae; perithecia ex orbiculari elliptica (700-900 μ long. × 500-700 μ lat.), innato-prominula, atra laevia nitentia coriacella, contextu indistincto, rima brevi strictissime dehiscentia v. per aetatem frustulatim decidua; asci cylindracei, sursum leniter attenuati, apice truncati (rarius subrotundati), deorsum breviter cuneati ac pedicello brevissimo crassoque suffulti (66-80 × 8-10 μ), octospori, paraphysibus filiformibus apice rectis non incrassatis obvallati, iodi ope dilute coerulescentes; sporidia fasciculata, filiformia (1 μ crass.), ascorum longitudine, granulosa, hyalina.

An huc *Loph. breve* (Berk.) DNtrs?

Hab. Ad culmos emortuos putrescentes *Rosthkoviae grandiflorae* in *Staten island*, Mart. 1882.

305. Lophodermium clavuligerum Speg. (n. sp.)

Diag. Maculae nullae sed totum folium pallescens; perithecia sparsa amphigena saepius tamen hypophylla, e discoideo subelliptica (400-600 μ long. × 300-500 μ lat.), atra glabra opaca innato-prominula, in sicco subcollabescentia, coriacella, contextu indistincto, rimula minutissima vix perspicua donata; asci subclavato-cylindracei, sursum acutiuscule rotundati, deorsum attenuati (100-110 × 7 μ) ac in pedicello brevi crassoque producti, tenuiter tunicati, octospori, paraphysibus dilute chlorinis, apice clavulatis obvallati; sporidia fusoideo-filiformia (1,5 μ crass.), 5-9-septata, non constricta, ascorum longitudine, fasciculata, utrinque acutiuscula, granuloso-farcta, hyalina.

Hab. Ad folia dejecta emortua *Pernettiae mucronatae* in pratis *Staten island,* Mart. 1882.

306. Lophodermium fuegianum Speg. (n. sp.)

Diag. Maculae pallescentes indeterminatae; perithecia laxe gregaria, elliptica, utrinque obtusa, non v. vix prominula (500-700 μ long. × 200 μ lat.), glabra atra nitentia, contextu indistincto, rimose dehiscentia; asci cylindracei, antice rotundati non v. vix crassiuscule tunicati ac 1-foveolati, postice attenuati ac in stipite breviusculo crassoque desinentes (60-65 × 5 μ), octospori, paraphysibus flexuosis exillimis apice non incrassatis ac subrectis obvallati; sporidia fusciculata, linearia, superne obtusa, inferne acuta (40 × 1,5 μ), septulata, hyalina.

Hab. In culmis putrescentibus *Rosthkoviae grandiflorae* in *Agaia,* Jun. 1882.

Obs. Iodi ope nulla; species a *Loph. antarctico* Speg. longe abhorrens.

307. Lophodermium hysterioide (Pers.) Sacc. — Syll. II, p. 791.

Hab. Vulgatum ad folia dejecta putrescentia *Fagi betuloidis* hinc inde in sylvis per *Fuegiam* totam, hiem. 1882.

Obs. Maculae indeterminatae, pallescentes; perithecia amphigena laxe inordinateque gregaria v. sparsa, elliptica (0,7-1,2‴ long. × 300-400 μ. lat.) utrinque acutiuscule rotundata, atra laevia subnitentia innato-superficialia, rimose dehiscentia; asci clavulati, sursum subconoidei ac obtusiuscule acutati, deorsum attenuati ac in pedicello longiusculo crassiusculoque producti (100-120 × 10 μ), paraphysibus filiformibus apice uncinatis v. subcircinatis (non sporidiis!) obvallati, octospori; sporidia fasciculata, utrinque recta atque acutiuscula filiformia ascorum longitudine (1 μ. crass.), ex obturaculo ascorum exilientia.

308. Lophodermium oxyascum Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa, innata, vix prominula, elliptica (600-1000 μ. long. × 300-400 μ. lat.), utrinque acutiuscula atra glabra subnitentia rimose dehiscentia, coriacella; asci cylindracei apice longiuscule acutissimeque conici, deorsum breviter attenuati ac pedicello brevissimo crassoque suffulti (45-60 × 5 μ), octospori, paraphysibus filiformibus, tenuissimis ubique rectis ac cylindraceis obvallati; sporidia fasciculata, ascorum longitudine, tenuissima (0,5-0,8 μ. crass.), utrinque acuta, granuloso-farcta, hyalina. Ascorum apex iodi ope intense coerulescit.

Hab. Non rara in foliis *Luzulae, Poae, Unciniae* ac *Festucarum* hinc inde in *Staten island* et *Fuegia*, aest. et hiem. 1882.

309. Lophium? perexiguum Speg. (n. sp.)

Diag. Perithecia in matrice latissime dealbata laxe sparsa, subparallela, immersa, linearia (500-1000 μ long. × 120-150 μ lat.), vix labiis acutis conniventibus non v. modice apertis atris carbonaceis exertis donata; asci cylindracei, apice rotundati crassissime tunicati, deorsum attenuati breviter pedicellati (80–90 × 2–3 μ), paraphysibus densiusculis filiformibus apice rectis v. subuncinatis non incrassatis obvallati, octospori; sporidia filiformia, fasciculata, ascorum longitudine, subimperspicue guttulata, hyalina.

Hab. In trunco *fagineo* vetusto fluitato in *Slogget bay*, Jun. 1882.

310. Acrospermum antarcticum Speg. (n. sp.)

Diag. Perithecia sparsa, saepius geminata, erecta, elliptica, valide compressa, superne acute obtusata, inferne cuneata ac brevissime crasseque stipitata (600-700 μ alt. × 250-300 μ lat. × 80-100 μ crass.) margine rotundata, atra glabra membranaceo-coriacea, contextu subindistincte parenchymatico olivaceo; asci cylindracei, longissimi, apice rotundati crasse tunicati lateque 1-foveolati, deorsum longe attenuati (450-500 × 3 μ), aparaphysati; sporidia fasciculata, filiformia, tenuissima ascorum fere longitudine (300×0,5 μ), primo minutissime guttulata, dein densiuscule septata, hyalina.

Hab. Ad caules foliaque arida putrescentia *Hamadryadis magellanicae* in alpinis prope *Port Cook* in *Staten island*, Mart. 1882.

TUBERACEAE Vitt.

311. Endogone fuegiana Speg.—Tuber. arg. n. 5.

Hab. Ad radices muscorum in sylvis prope *Hope harbour* in *Clarence island*, Maj. 1882.

CYTTARIEAE Speg.

Fungi globosi v. obovati, vivi carnoso-tenaces, sicci subcornei, farcti v. cavi, peripherice loculiferi, cortice mucedineo deliquescenti-evanescente tecti, mycelio perenni in ramis viventibus arborum plus minusve late innato-effuso ac illos tuberculoso-hypertrophicos efficiente donati; loculi sphaerici majusculi superne laciniatim v. ostiolatim (obturaculo mucoso-fatiscente) dehiscentes, pulpa ascigera mucosa repleti; asci cylindracei, octospori, longe denseque paraphysati; sporidia elliptica laevia hyalina.

Familia vegetatione natura ac fabrica longe a Discomycetibus abhorrens, cum nulla alia comparanda.

312. Cyttaria darwinii Berk.— On an edib. fung. f. Tierra del Fuego n. 1.

Hab. Vulgata in ramis vivis *Fagi antarcticae* ubique per *Fuegiam* totam, aut. et hiem. 1882.

Obs. Alba v. albo-pallescens, globosa (2-4″ diam.), ubique rotundata non v. vix basi umbilicata, sessilis v. vix brevissime crassiusculeque stipitata, semper farcta, primo laevis dein favosa, glabra, cortice primo coriaceamembranaceo, dein liquescenti-evanescente tecta; loculi globosi (2-3‴ diam.), primo clausi, dein obturaculo mucoso evanescente late ostiolato-aperti immarginati, pulpa flavescente pellucida farcti; asci cylindracei longe pedicellati (p. sp. 90-100 $\times$ 10 μ — ped. 50-70 $\times$ 5-9 μ), apice truncato-rotundati crassiusculeque tunicati, iodi ope nulla, paraphysibus filiformibus subaequilongis densiuscule obvallati; sporidia recte v. oblique monosticha, recte elliptica, utrinque obtusiuscula (14-16 $\times$ 8 μ), laevia nubiloso-farcta hyalina.

Species edulis, insipida, gummosa, per aetatem nigre-

scens ac liquescens. Incolae illam crudam comedunt ac forman juvenilem *Ashcinik*, maturam *Awacik*, senescentem ac nigrescentem *Mmáâma* vocant.

313. Cyttaria Berterii Berk. — l. c. n. 2.

Hab. Rara in ramis vivis *Fagi obliquae* in *Fuegia* tota, aut. et hiem. 1882.

Obs. Flava v. aurantia, obovata v. subturbinata, superne rotundata (1-3″ diam.), inferne subcuneata, subsessilis, farcta, per aetatem cava evadens, primo laevia dein laxe alveolata; loculi subglobosi v. obovati (1-3‴ diam.) primo clausi dein lacero-dehiscentes, margine saepe marginati v. subappendiculati, pulpa flavescente pellucida farcti; asci cylindraceo-fusoidei (100 × 7-8 μ), utrinque attenuati, apice truncati crassiusculeque tunicati ibique iodi ope dilute coerulescentes, octospori, paraphysibus filiformibus vix longioribus obvallati; sporidia oblique v. recte monosticha, elliptica, non v. vix inaequilateralia, utrinque obtusa (15 × 5-6 μ), grosse biguttulata (an per aetatem 1-septato constricta ?), hyalina.

Species edulis, gummoso-dulcis, minus tenax, per aetatem liquescenti-fuscescens. Incolae illam crudam comedunt ac forman juvenilem *Sháshcipu*, maturam *Cattörem*, senescentem *Aussof* vocant.

Speciem alteram in *Fago betuloide* vigentem, colore albo cavitate interna sapore dulci mox dignoscendam inveni, sed specimina in naufragio amisi.

314. Cyttaria Hookeri Berk. — in Hook., Fl. ant. vol. II, cum tab.

Hab. Vulgatissima ad ramos vivos *Fagi obliquae* et *F. antarcticae* in sylvis per *Fuegiam* totam, aut. et hiem. 1882.

Obs. Flavescenti-cinnamomea, obovata v. clavulata, superne applanato-umbonata, inferne attenuata (1-1,5″

alt. × 4-6‴ diam.), farcta, laevis, glabra, in disco superiore periphaerice 4-8-peritheciigera, caeterum sterilis; loculi e globoso obovati (2‴ diam.), primo clausi dein lacero-dehiscentes, non v. marginati, pulpa fuscescente v. pallide olivascente farcti; asci cylindraceo-fusoidei, apice truncato-rotundati, deorsum longe attenuati (200-250 × 20 μ), octospori, paraphysibus densis apice corpuscolo clavulato ruguloso–anguloso olivaceo deciduo coronatis obvallati; sporidia saepius in parte ascorum supera conglobata, elliptica, non v. vix inaequilateralia, utrinque obtuse rotundata (15 × 10 μ), pallidissime olivascentia.

Inter paraphyses adsunt corpuscula globoso-cuboidea (18-20 μ diam.) fumosa, catenulas (180-250 μ long.) torulosas basi longe stipitatas 8-10 articulatas efformantia, pallide fuscescenti-fuliginea; an conidia?

Species, facile novi generis typum sistens, edulis sapore subdulci, fructus castaneae subputrescentis simillimo, non ingrato donata, carnosulo-compacta, per aetatem mucoso-liquescens. Incolae illam crudam comedunt et *Assuim* vocant.

Formam alteram in *Fago betuloide* vigentem, obovatam disco carentem ac apice subconicam pallidiorem sapore magis grato donatam ab incolis *Uaiáca* vocatam notavi et collegi sed specimina amisi.

Cyttariae omnes perdifficiles studiandae, nam maturitate rapidissimae ac mox diffluentes, servatae alcoholis vi v. exsiccatae quam maxime contrahuntur ac deformantur (praecipue in fructificationis partibus) et in vivo fere tantum illas perscutare possibile est.

DISCOMYCETES Fr.

315. MITRULA? ANTARCTICA Speg. — Fung. pat. n. 158.

Hab. Inter folia ramentaque sternata in sylvis prope *Ushuvaia,* Maj. 1882.

316. Peziza antarctica Speg. (n. sp.)

Diag. Leucoloma; cupulae sparsae v. laxe gregariae, sessiles, superficiales, primo subsphaeroideae, mox applanato-expansae (5-10‴ diam.), crassiusculae, ceraceo-carnosulae, extus glabrae v. subsquamulosae, rubescenti-testaceae, margine acutae integrae non v. vix repandulae, disco subconcavo laevissimo flavo v. aurantio-rubro donatae; asci cylindracei, antice obtuse rotundati, deorsum breviter attenuato-pedicellati (110-140 × 15-20 μ), octospori, paraphysibus non v. vix longioribus (2-3 μ crass.) articulatis apice obtusis ac subclavulatis obvallati; sporidia transverse v. oblique monosticha, elliptica, utrinque rotundata (18-20 × 11 μ), laevia, hyalina, eguttulata.

Hab. Ad terram pinguem muscosam in sylvis prope *Hope harbour*, Maj. 1882.

Obs. Species *P. semiimmersae* Karst. et *P. euchroae* Karst. species peraffinis ac fere intermedia, ab utraque tamen satis distincta. Iodi ope nulla.

317. Peziza stercorea Pers. — Obs. 2, p. 89.

Hab. Vulgatissima in fimo vaccino et equino in herbosis prope *Ushuvaia,* Maj. et Jun. 1882.

Obs. Pili acuti rigiduli fulvelli parce (basi) septati (200-350 × 20 μ); asci cylindracei (200 × 5 μ); sporidia recte v. oblique monosticha utrinque obtusa (20-22 × 10-14 μ) hyalina. Iodi ope nulla.

318. Peziza scutellata L. — Suec. 458.

Hab. In truncis humo obovolutis putrescentibus prope *Penguin rookery* in *Staten island,* Febr. 1882.

319. Lachnella antarctica Speg. (n. sp.)

Diag. Lachnum; cupulae densiuscule sparsae, sessiles v. vix substipitatulae, minutissimae, udae applanato-concavae (0,5-1''' diam.), siccae globuloso contractae, candidae, villosulae, pilis longiusculis cylindraceis (150-250 × 4-5 μ) apice obtusiusculis basi non incrassatis parcissime septulatis laevissimis flexuosulis dense vestitae, disco laevi albo-ceraceo donatae; asci cylindraceo-subfusoidei, apice truncati, deorsum breviuscule crasseque pedicellati (60-65 × 5 μ), octospori, pseudoparaphysibus clavulatis, apice longiuscule attenuatis acutissimis non v. vix longioribus (65-70 × 3-4 μ) hyalinis parce obvallati; sporidia subfusoidea, utrinque acutiuscula (10 × 1-1,5 μ), recta v. curvula, continua, hyalina.

Hab. In ramulis emortuis decorticatis *Mayteni magellanicae* in *Gabel island*, Jun. 1882.

Obs. Contextus apothecii subprosenchymaticus pallide melleus; iodi ope nulla. Species *Cyphellae albo-violascentis* (A. S.) Karst. simillima, partibus fructificationis inspectis tantum dignoscenda; peraffinis etiam *L. mollissimo* Karst.

320. Lachnella australis Speg. (n. sp.)

Diag. Lachnum; cupulae hypophyllae, hinc inde 3-8 laxe gregariae, minutissimae, udae turbinato-applanatae (400-500 μ diam.), siccae non v. vix contractae margine involutae, deorsum attenuatae ac in pedicello glabro rigidulo concolore (500-800 × 50-80 μ) desinentes, extus sordide albae densiuscule villosulae, pilis breviusculis rectis v. flexuosulis cylindraceis (60-80 × 3 μ) apice non attenuatis obtuseque rotundatis, 3-5-septatis saepeque ad septa constrictis dense minuteque papillulosis hyalinis vestitae, disco pallescenti-ceraceo donatae; asci cylindraceo subclavati, antice attenuati, vertice non v. vix subtruncatulis ac minute 1-foveolati, postice longe

crasseque attenuato-pedicellati (45 × 2,5-3 μ), octospori, pseudoparaphysibus longioribus (65-75 × 2,5 μ), utrinque attenuatis, apice acutissimis, parce obvallati; sporidia acicularia v. subclavulata, utrinque attenuato-acutata (10 × 0,7-0,8 μ), continua, hyalina.

Hab. Ad folia dejecta putrescentia *Berberidis ilicifoliae* in sylvis in *Staten island,* Mart. 1882.

321. Lachnella insularis Speg. (n. sp.)

Diag. Lachnum; cupulae hinc inde laxe gregariae, sessiles, udae applanato-concavae (0,5-1,5‴ diam.), siccae subgloboso-contractae, extus sordide rufescenti- v. griseo-testaceae, apothecii contextu parenchymatico hyalino, pilis longiusculis gracilibus (200-300 × 3 μ) cylindraceis flexuosulis rigidulis sursum non attenuatis apice obtusis basi non incrassatis 6-12-septatis non constrictis rufo-fuligineis vestitae, disco sordide ceraceo donatae; asci clavulati, sursum cuneati apiceque subtruncatulis, deorsum longiuscule attenuato-pedicellati (p. sp. 85 × 5 μ — ped. 15-20 × 2-3 μ), octospori, pseudoparaphysibus longiusculis subclavulatis apice acutissimis (110-120 × 2-3 μ) hyalinis obvallati; sporidia recte disticha v. oblique monosticha, subfusoidea, utrinque attenuato-obtusata (9-11 × 1,5 μ), recta v. subinaequilateralia, hyalina, continua; an per aetatem medio 1-septata?

Hab. Ad culmos vaginasque emortua putrescentia *Hierochloae antarcticae* prope *Penguin rookery* in *Staten island,* Febr. 1882.

Obs. Obturaculus ascorum minutissimus iodi ope dilute coerulescens.

322. Lachnella fuegiana Speg. (n. sp.)

Diag. Lachnum; cupulae hinc inde laxe gregariae superficiales sessiles v. vix subpedicellatae, udae appla-

nato-concavae (500-600 μ diam.), siccae globoso-contractae, candidae, extus pilis biformibus intermixtis vestitae, aliis longioribus (200-300 × 4 μ) deorsum cylindraceis non v. 1-2-septulatis sursum continuis attenuatis apice acutiuscule rotundatis medio densiuscule noduloso-asperulis, aliis brevioribus (80-100 × 5 μ) cylindraceis 1-3-septatis apice obtusis non attenuatis (ubique laevibus), disco albo-ceraceo donatae; asci cylindraceo-subclavati apice late rotundati non v. lenissime angulato-acutati, deorsum breviter crasseque pedicellati (45-48 × 5-6 μ), octospori, pseudoparaphysibus tenuibus nonnihil longioribus (50-60 × 3 μ) apice incrassatulis ac cuneato-acutissimis parce obvallati; sporidia recte v. oblique monosticha, cylindraceo-subfusoidea, utrinque attenuato-obtusata (8-10 × 1,5-2 μ), inaequilateralia, continua, hyalina.

Hab. Ad folia emortua putrescentia *Poae Forsteri* in scopulosis prope *Port Cook* in *Staten island,* Mart. 1882.

Obs. Obturaculus ascorum minutissimus intense iodi ope coerulescit.

323. Lachnella velutarioides Speg. (n. sp.)

Diag. Eulachnella; cupulae hinc inde in rimulis densiuscule gregariae, sessiles, udae patellari-explanatae (1-2‴ diam.) saepe e mutua pressione angulosae, siccae contractulae margine subinvolutae, extus pulchre fulvo-v. rufescenti-tabacinae, villosulae, pilis cylindraceis sursum non attenuatis apice tamen acutatis basi non incrassatis sed coalescentibus (200-250 × 4-5 μ) non v. parce subnoduloso septatis hyalinis substancia sordide fulvescente granuloso-incrustatis vestitae, disco pallescenti-carneo donatae; asci cylindracei, apice obtuse rotundati, deorsum breviter attenuato-pedicellati (70-80 × 7-8 μ), octospori, paraphysibus filiformibus vix longioribus parce obvallati; sporidia oblique monosticha,

cylindracea v. allantoidea, utrinque obtuse rotundata (11-16 × 4 μ), continua, hyalina.

Hab. Ad ramulos vivos v. emortuos *Chiliotrichi amelloidis* et *Escalloniae serratae* in *Staten island*, Mart. 1882.

Obs. Apothecii contextus carnosulus fere indistinctus sordidus; iodi ope nulla. Species habitu *Velutariis* plurimis simillima.

324. Lachnella virginea (Batsch.) Sacc. — Consp. gen. Disc. p. 4.

Hab. In trunco carioso putrescente prope *Slogget bay*, Jun. 1882.

Obs. Specimina fuegiana ab europeis vix sporidiis nonnihil majoribus (12-13 × 3 μ) vix recedunt. Iodi ope nulla.

325. Lachnella? testaceo-rufa Speg. (n. sp.)

Diag. Eulachnella; cupulae sparsae v. hinc inde subgregariae, in rimulis fere absconditae, udae explanatae (1-2‴ diam.), siccae difformi-contractulae, coriacellae, duriusculae, sordide obscureque testaceae, extus primo parce rufo-puberulae, pilis minutis brevibus continuis flexuosis apice obtusis basi coalescentibus (20-30 × 3 μ) pallide fulvis vestitae, per aetatem glabratae, contextu fulvescenti-ferrugineo parum distincto subprosenchymatico donatae, disco non v. vix pallidiore plano ornatae, margine acutiusculae, subrepandulae; asci cylindraceo-subclavulati, apice obtuse rotundati, deorsum longiuscule attenuati (75-80 × 5 μ), octospori, paraphysibus longis, densiusculis obvallati; sporidia recte v. oblique monosticha, elliptico-elongata v. subnavicularia, utrinque acutato-obtusata (8-10 × 3-4 μ) hyalina. Iodi ope nulla.

Hab. Vulgata ad rimulas ramulorum emortuorum v. subviventium *Chiliotrichi amelloidis* in *Staten island,* Mart. 1882.

326. Helotium antarcticum Speg. (n. sp.)

Diag. Cupulae sparsae v. laxe gregariae, turbinato-calyciformes (2-2,5‴ diam.) firmae tenacellae crassiusculae, extus ex albo fulvescentes, intus pallescentes, margine acutae integerrimae glabrae, basi in pedicellis breviusculis crassiusculisque cylindraceo-conoideis (1-1,5‴ long. × 300-500 μ crass.) saepe basi connato-confluentibus candidis productae; asci cylindracei, antice obtuse rotundati, postice attenuato-pedicellati (180-200 × 8 μ), octospori, dense paraphysati; iodi ope nulla; sporidia recte v. oblique monosticha, elliptica v. subfusoidea, utrinque acutata (14-15 × 6 μ), non v. biguttulata, hyalina, continua.

Hab. Ad truncos decorticatos putrescentes *Fagi betuloidis* in sylvis in *Staten island,* Mart. 1882.

Obs. Species firmula tenacella habitu fere *Rutstroemiae firmae* (Pers.) Karst., a genere nonnihil desciscens.

327. Helotium buccinula Speg. (n. sp.)

Diag. Cupulae sparsae v. laxe gregariae epiphyllae ceraceae opaceae discoideae (500-800 μ diam.), superne applanatae v. convexulae flavescentes, inferne applanato-subturbinatae glabrae albae, obtuse crasseque marginatae, pedicello longiusculo gracili (1-1,5‴ long. × 100-150 μ crass.) concolore glabro non v. vix striatulo suffultae; asci clavulati, sursum breviter cuneato-rotundati apiceque subtruncati late pervii, deorsum in pedicello mediocri attenuati (90-100 × 8-12 μ), paraphysibus paucis filiformibus obvallati, octospori; iodi ope nulla; sporidia oblique monosticha, clavulata, sursum obtuse rotundata, postice attenuato-

acutata (25 × 5 μ), hyalina, grosse 2-3-guttulata; an demum biseptata?

Hab. Ad folia dejecta *Berberidis ilicifoliae* in dumetis prope *Shammacus*, Maj. 1882.

328. Helotium citrinum (Hdw.) Fr. — Karst., Myc. fenn. I, p. 120.

Hab. Non rarum ad ramulos dejectos putrescentes *Fagi betuloidis*, *Mayteni magellanicae* etc. per totam *Fuegiam*, hiem. 1882.

Obs. Specimina nonnulla vix a typo recedunt cupulis extus subpruinulosis. Asci 90-100 × 9 μ; sporidia subfusoidea 10-12 × 4-5 μ, hyalina.

329. Helotium clavuligerum Speg. (n. sp.)

Diag. Cyathicula; cupulae sparsae amphigenae minutissimae, superne discoideo-applanatae (600-800 μ diam.) rufescentes, inferne subturbinatae glabrae pulchre rubescenti-ochraceae, margine acutiusculae hinc inde denticulato-subfimbriatae, stipite breviusculo ac crassiusculo (700-1000 × 130-160 μ) inferne non v. vix incrassato saepius nigricante rigidulo suffultae; asci cylindracei v. cylindraceo-subfusoidei, antice truncati v. truncato-rotundati, postice attenuato-pedicellati (75-80 × 7-9 μ), octospori, paraphysibus filiformibus non v. vix longioribus continuis apice clavulatis parce obvallati; ascorum obtoraculus minutissimus iodi ope coerulescit; sporidia oblique monosticha, elliptica v. ovoidea, utrinque plus minusve obtusata (9-10 × 4 μ), non v. nubiloso-farcta, hyalina.

Hab. Ad folia dejecta putrescentia *Fagi betuloidis* in sylvis in *Staten island*, Febr. 1882.

330. Helotium? chlorosplenioide Speg. (n. sp.)

Diag. Cupulae infundibuliformes, majusculae (3-5‴ diam.)

tenuiusculae tenacellae ligneo-pallescentes, disco glaberrimo obscuriore donatae, extus minutissime subfibroso-striatae, margine acutae integerrimae, deorsum in stipite longiusculo ac gracili terete (3-5‴ long. × 0,4-0,5‴ crass.) concolore basi non incrassato insititio glabro donatae, matrice late maculato-infuscata insidentes; asci cylindraceo-subclavulati, antice non v. vix attenuati apice truncati, postice longe attenuato-stipitati (100-110 × 6-6,5 μ), paraphysibus filiformibus non v. vix longioribus laxe obvallati, octospori; sporidia oblique monosticha, elliptico-fusoidea utrinque acutissima (10 × 4-5 μ) recta v. subcymbiformia, hyalina non v. grosse 1-guttulata.

Hab. Ad ramulos fagineos dejectos putrescentes in sylvis prope *Port S. John* in *Staten island*, Mart. 1882.

Obs. Species certe a genere *Helotio* Fr. separanda, habitu *Chlorosplenio* Fr. simillima.

331. Helotium epiphyllum Fr. — Karst., Myc. fenn. I, p. 122.

Hab. Non rarum ad folia dejecta *Fagi antarcticae* et *F. obliquae* in sylvis per totam *Fuegiam*, hiem. 1882.

Obs. In thallo *Marchantiae tabulari* prope *Port Cook* in *Staten island* specimina nonnulla *H. epiphyllo* Fr. var. γ *Marchantiae* Berk. legi, sed a typo nonnihil recedunt stipite longiore subpuberulo, disco acute marginato.

332. Helotium fuegianum Speg. (n. sp.)

Diag. Cupulae densiuscule sparsae obconicae concaviusculae (0,6-1‴ diam.), margine acutae integerrimae v. repandulae, intus pulchre flavido-melleae, extus pallidiores glabrae, in stipite brevissimo ac crasso candido, non v. vix basi puberulo desinentes; asci cylindracei v. cylindraceo-subclavulati, antice obtuse rotundati, deor-

sum plus minusve longe attenuato-pedicellati (55-65 × 5 μ), octospori, paraphysibus filiformibus nonnihil longioribus densiuscule obvallati; iodi ope ascorum apice dilute, obturaculo intense coerulescunt; sporidia oblique monosticha, elliptica utrinque obtusa (5-8 × 2-3 μ) recta v. inaequilateralia, hyalina continua; an demum medio 1-septata?

Hab. Vulgatissimum ad ramulos dejectos putrescentes fagorum in *Fuegia* et *Staten island*, aest. et hiem. 1882.

333. Helotium herbarum (Pers.) Fr.—Karst., Myc. fenn. I, p. 117.

Hab. Ad caules dejectos putrescentes *Senecii candicantis* prope *Penguin rookery* in *Staten island*, Febr. 1882.

334. Helotium microspermum Speg. (n. sp.)

Diag. Cupulae in ligno denudato hinc inde dense gregariae majusculae firmae cupulato-expansae (2-3‴ diam.) sessiles v. subsessiles, disco concaviusculo sordide rufescente v. melleo, margine acuto integerrimo donatae, extus sordide fuscae minutissime albo-pruinulosae; asci cylindracei v. subclavulati, sursum leniter attenuati apice obtuse rotundati crassiuscule tunicati, deorsum longiuscule crasseque attenuato-pedicellati (40-45 × 2-3 μ), octospori, paraphysibus paucis non v. vix longioribus obvallati; sporidia recte v. oblique mono- v. di-sticha, elliptica utrinque subacutato-rotundata (3-3,5 × 1,5-1,8 μ), minute biguttulata, hyalina.

Hab. In ramulis emortuis decorticatis *fagineis* in sylvis prope *Ushuvaia*, Maj. 1882.

335. Helotium? nipteroide Speg. (n. sp.)

Diag. Cupulae densiusculae sparsae, udae applanato-concavae (1-2‴ diam.), siccae subcontractulae angulosae sessiles crassiusculae rigidulae, extus pulchre gri–

seo–fuscae minutissime pruinulosae, papillis pusillis 1-cellularibus obtusis flexuosis (10-25 × 5 μ) vestitae, contextu subparenchymatico carnoso subindistincto donatae, disco plano ceraceo flavescente ornatae, margine acutiusculae integrae v. repandulae; asci cylindracei, antice acutato-rotundati v. subtruncati, postice longiuscule attenuato-pedicellati (80-90 × 7-8 μ), paraphysibus paucis filiformibus obvallati, octospori; sporidia recte v. oblique mono- v. disticha, elliptica v. elliptico-ovoidea utrinque obtusa (12-13 × 3-3,5 μ), hyalina, continua. An per aetatem medio 1-septata?

Hab. In truncis cariosis putrescentibus *fagineis?* in sylvis in *Staten island*, Mart. 1882.

Obs. Species a genere *Helotio* Fr. longe recedens, cum nullo alio tamen bene congruens, ad interim hoc genere adscripta!

336. Helotium sordidulum Speg. (n. sp.)

Diag. Cupulae densiuscule sparsae turbinato–calyciformes minutissimae (300-400 μ diam.) subpellucidae, disco infundibulari, dilutissime alutaceae, margine acutissimae integrae v. irregulariter eroso–denticulatae, extus sordide albae non v. vix tenuissime pruinulosae, sessiles v. pedicello brevissimo ac crassiusculo concolore suffultae; asci cylindraceo-subclavulati, sursum leniter attenuati apice subtruncato-rotundati crassiuscule tunicati minute 1-foveolati, deorsum attenuato-pedicellati (45-50 × 3-3,5 μ), octospori, paraphysibus parcis filiformibus apice non v. vix subclavulatis obtusis obvallati; sporidia oblique monosticha, elliptico-cylindracea utrinque obtusiuscule rotundata (4-4,5 × 1,5 μ), recta v. inaequilateralia, hyalina, continua.

Hab. Ad corticem fagineum putrescentem peridermio denudatum in sylvis prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Iodi ope tunica ascorum dilute, obturaculus intensius coerulescunt. Prope *Ushuvaia* specimina nonnulla notis externis perfecte cum typo congruentia, internis autem nonnihil recedentia (ascis 45 × 3 μ; paraphysibus apice non clavulatis; sporidiis minoribus 2,5-3,2 × 1,5 μ) legi; an species distincta?

337. Chlorosplenium aeruginosum (Fl. Dan.) DNtrs. — Karst., Myc. fenn. I, p. 108.

Hab. In truncis emortuis putrescentibus *Fagorum* in sylvis prope *Ushuvaia* et *Slogget bay*, hiem. 1882.

338. Chlorosplenium fuegianum Speg. (n. sp.)

Diag. Cupulae hinc inde gregariae, udae infundibuliformi-explanatae (1-2,5‴ diam.), siccae contractulae involutae, extus intusque sordide atro-olivaceae, extus in juventute rufescenti- v. fulvescenti-pruinulosae, dein glabratae, margine integerrimae tenacellae rigidulae, postice in stipitibus brevibus ac crassiusculis (1-2‴ long. × 400-500 μ crass.) saepe basi connatis concoloribus glabris v. olivaceo-pruinulosis cuneato-attenuatae; asci clavulati, antice rotundati crassiuscule tunicati non v. minute bifoveolati, postice longe stipitato-attenuati (p. sp. 40-8 μ — ped. 70-90 × 3-5 μ), octospori, paraphysibus filiformibus densiusculis obvallati; sporidia apice ascorum subconglobata, recte disticha, elliptico-fusoidea utrinque acutato-obtusata (10 × 4-5 μ), hyalina continua; an per aetatem 1-3-septata?

Hab. Ad ramos decorticatos putrescentes *Fagi betuloidis* prope *Port Vancouver* in *Staten island*, Mart. 1882.

Obs. Iodi ope nulla; lignum maculis latiusculis fusco-olivaceis saepe furfure rufescenti ornatis donatum.

339. Mollisia fuegiana Speg. (n. sp.)

Diag. Pyrenopeziza; cupulae superficiales sparsae v. hinc

inde laxe gregariae, e globoso hemisphaericae (250-300 μ diam.), disco applanatae v. vix concavae sordide fusco-fuligineae, extus atrae glabrae, contextu parenchymatico fuligineo donatae; asci cylindracei v. subclavati, antice rotundati crassiusculeque tunicati, deorsum breviter attenuato-pedicellati (35-40 × 10 μ), octospori, paraphysibus filiformibus densiusculis obvallati; sporidia oblique monosticha, cylindraceo-fusoidea utrinque acutiuscula (6-7 × 1,5-2 μ), hyalina, continua.

Hab. Ad folia viva v. languida *Poae* minutae cujusdam in sylvis prope *Ushuvaia*, Maj. 1882.

340. Mollisia? coprophyla Speg. (n. sp.)

Diag. Niptera; cupulae saepius hinc inde densiuscule aggregatae sessiles, udae cupulato-explanatae (0,5-3‴ diam.), siccae contractulae crassiuscule membranaceae tenacellae rigidulae, intus extusque fusco-olivaceae glaberrimae, margine acutae integrae non v. vix repandulae, contextu parenchymatico atro intus pallidiore; asci cylindracei, antice obtuse rotundati, postice breviter crasseque attenuato-pedicellati (140-150 × 8-10 μ), paraphysibus densis filiformibus hyalinis apice coalescentibus olivascentibusque obvallati, octospori; sporidia recte v. oblique monosticha, elliptica, utrinque obtuse rotundata (16 × 8 μ), hyalina, continua, laevia non v. 1-guttulata.

Hab. In fimo equino et vaccino putrescente vulgata prope *Ushuvaia*, Jun. 1882.

Obs. Iodi ope tunica ascorum apice dilute coerulescit.

341. Mollisia myiocopron Speg. (n. sp.)

Diag. Cupulae dense sparsae applanato-expansae discoideae (0,5-1‴ diam.) tenui membranaceae sessiles late arcteque matrici adnatae glabrae laeves, contextu majuscule parenchymatico olivaceo-fusco; asci cylindra-

ceo-clavulati, antice subtruncato-rotundati crassiuscule tunicati, postice breviter crasseque attenuato-pedicellati (40 × 3-3,5 μ), octospori, paraphysibus filiformibus obvallati; iodi ope nulla; sporidia recte disticha, obovata v. elongato-elliptica superne obtuse rotundata inferne acutiuscula (5-7 × 1-1,5 μ) recta v. inaequilateralia, hyalina, continua.

Hab. In ramis fagineis decorticatis ad tuguria incolarum in *Gertrude Cove*, Jun. 1882.

342. Niptera antarctica Speg. (n. sp.)

Diag. Cupulae sparsae v. hinc inde laxe gregariae, primo epidermide tectae, dein, ea secedente, denudato-superficiales, hemisphaerico-cupulatae (200-250 μ) atrae glabrae, contextu margine prosenchymatico (an fimbriatulo?) caeterum parenchymatico olivaceo-fusco donatae; asci cylindracei v. subfusoidei, antice truncato-rotundati crassiuscule tunicati minutissime bifoveolati, postice brevissime crasseque attenuato-pedicellati (65-80 × 5 μ), octospori, paraphysibus paucis guttulatis obvallati; iodi ope obturaculus ascorum intense coerulescit; sporidia recte disticha, cylindraceo-fusoidea, utrinque obtusiuscula (17-18 × 1,5-2 μ), medio 1-septata non constricta, hyalina.

Hab. Ad culmos emortuos *Rosthkoviae grandiflorae* in pratis uliginosis in *Staten island*, Febr. 1882.

Obs. Species vere pusilla ascomatibus quandoque matrice fere immersis nonnihil ad genus *Fabrea* Sacc. vergens.

343. Belonidium amoenum Speg. (n. sp.)

Diag. Cupulae superficiales sparsae v. hinc inde 2-3-aggregatae sessiles, udae globulosae, disco tumido-hemisphaerico (250-400 μ diam.) albo-ceraceo donatae, siccae contracto-concavae globosae, extus flavescentes villosulae, pilis longiusculis cylindraceis apice obtusis

basi non incrassatis (60-100 × 1-2 μ) laevibus 4-6-septatis non constrictis rigidulis e hyalino-chlorinis vestitae; asci clavulati, antice abrupte breveque cuneati apiceque truncati, deorsum lenissime attenuati (60-70 × 5-6 μ), aparaphysati, octospori; sporidia fasciculata, bacillaria, vix subclavulata, superne obtuse rotundata, inferne attenuato-acutata (35-40 × 1,5 μ), 3-5-septata non constricta, hyalina.

Hab. Ad culmos emortuos putrescentes *Rosthkoviae grandiflorae* in *Staten island,* Mart. 1882.

344. Ryparobius crustaceus (Fuck.) Speg. — Fung. copr. ven. n. 43.

Hab. Non rarus in fimo vaccino et equino putrescente in herbosis prope *Ushuvaia,* Jun. 1882.

345. Cenangium australe Speg. (n. sp.)

Diag. Stromata cortice innata sparsa v. laxe gregaria, primo peridermio tecta, dein, eo fisso, transverse erumpentia, elliptica (3–5‴ long. × 1–3‴ lat.), pulvinatula (1‴ crass.), superne applanata truncato-marginata fusco purpurea saepius pulvere subviolascente inspersa; cupulae stromate immersae, primo clausae (an medio minute papillulatae?), dein applanato-expansae (0,5-1‴ diam.), saepe subconfluentes, non v. parce obtuseque marginatae, non v. vix exertae, e violascenti purpurascentes; asci cylindracei, antice truncato-rotundati, postice breviter crasseque attenuato-pedicellati (90-180 × 14-18 μ), octospori, paraphysibus filiformibus longioribus dense obvallati; iodi ope tunica ascorum apice dilute violaceo-coerulescit; sporidia transverse v. oblique v. recte monosticha, elliptica, saepius utrinque obtusata (16-24 × 7-14 μ), crasse tunicata, granuloso-farcta v. grosse 2-guttulata, primo hyalina dein chlorinula v. dilute olivascentia.

Hab. Vulgata ad ramos dejectos putrescentes *Fagi betuloidis* in sylvis in *Staten island* et *Fuegia*, aest. et hiem. 1882.

Obs. Species fabrica naturaque fere *Bulgarieis* adscribenda, vegetatione tamen cenangioidea donata. An melius novum genus?

346. Tympanis antarctica Speg. (n. sp.)

Diag. Cupulae dense coespitosae, per rimas lineares transversas peridermii erumpentes, 10-50 in quoque coespitulo, minutae (250-350 μ. diam.) primo sphaeroideo-clausae dein irregulariter apertae, extus atrae subcarbonaceae glabrae, intus vix pallescentes; asci cylindraceo-clavati, apice obtuse lateque rotundati, deorsum brevissime crasseque noduloso-stipitati (75-80 × 10-14 μ.), myriospori, paraphysibus filiformibus longioribus dense obvallati; iodi ope nulla; sporidia inordinata conglobata muco immersa minuta cylindracea recta v. allantoidea (2-2,5 × 0,7-1 μ.) utrinque plus minusve rotundata hyalina.

Hab. Ad ramos emortuos *Fagi betuloidis* in sylvis prope *Agaia*, Jun. 1882.

Ameghiniella Speg. (n. gen.)

Diag. Cupulae primo parvulae tuberculum minutum cortice tectum efficientes, mox erumpentes ac explanato-expansae, basi connatae saepe confluentes, majores tenuiusculae membranaceae tenacellae flexiles plicato-undulatae fuscae v. atrae; asci pusilli octospori paraphysati; sporidia minuta cylindracea v. allantoidea, hyalina.

Obs. Genus singulare Clbr. *Fl. Ameghino* paleontologiae sud–americanae studioso acutissimo dicatum, epithecii natura ac fabrica inter *Rhizineas* ac *Bulgarieas* medium, vegetatione tamen ac fructificationis notis *Cenangieas* accedens.

347. Ameghiniella australis Speg. (n. sp.)

Diag. Stroma parvulum tuberculato-effusum nodosum (3-5‴ diam.), primo peridermio tectum, dein transverse erumpens, atrum; cupulae sessiles primo parvulae crassiusculae rigidulae, mox explanato-expansae majusculae (1-3″ diam.) crassiuscule membranaceae (300-450 μ crass.) coriacellae, flexiles, dense undulato-plicatae, margine acutae repandae v. sublobulatae atro-olivaceae, extus siccae olivaceo-pruinolosae, udae viscosulae, contextu interno rufescenti-ferrugineo; asci pusilli, antice rotundato-subtruncati, postice breviter crasseque pedicellati (40-50 × 3-4,5 μ), paraphysibus densis fuscidulis mucoso-diffluentibus obvallati, octospori; sporidia cylindracea v. allantoidea utrinque obtusata (4,5-6 × 0,7-1 μ), hyalina (luce refracta chlorina).

Hab. Ad ramos emortuos *Fagi betuloidis* in *Staten island* et *Fuegia* tota, aest. et hiem. 1882.

Obs. Species summopere polymorpha in juventute nunc *Cenangii* nunc *Triblidii* cujusdam habitum simulans, per aetatem tamem mox dignoscenda; asci centrifuge evolvuntur (jam e prima juventute) margine tandem semper sterile. Iodi ope nulla.

348. Coryne sarcoides Tul. — Sel. fung. carp. III, p. 190.

Hab. Vulgata in truncis putrescentibus fagineis in *Staten island* et *Fuegia*, aest. et hiem. 1882.

Obs. Asci cylindracei apice plus minusve rotundati v. acutati, deorsum longiuscule attenuato-pedicellati (100-135 × 7-8 μ), octospori, paraphysati; iodi ope tunica non v. dilute, obturaculus intensius coerulescunt; sporidia elliptica v. elliptico-elongata utrinque plus minusve attenuato-rotundata (10-18 × 4-6 μ), primo continua 2-4-guttulata, dein 2-4-pseudoseptata, hyalina.

349. Propolis lugubris Speg. (n. sp.)

Diag. Cupulae sparsae v. gregariae, subseriatae, elliptico-elongatae immersae erumpentes marginulatae (1-1,5‴ long. × 0,5-0,8‴ lat.), sordide obscureque fusco-olivaceae, glabrae; asci cylindracei, octospori, paraphysati, mox diffluentes; sporidia cylindraceo-elliptica utrinque rotundata (22-26 × 5-8 μ) inaequilateralia v. curvula, minute 2-guttulata, hyalina. Iodi ope nulla.

Hab. In ramis dejectis putrescentibus *Pernettiae mucronatae* in *Schyring island,* Jun. 1882.

350. Propolis pulchella Speg. (n. sp.)

Diag. Cupulae densiusculae sparsae, matrice infuscata impressae, margine frustulis matricis sublevatae cinctae, elliptica v. elongata (1-3‴ long.), applanatae disco roseae v. pallide cinerascenti-carneae; asci cylindracei v. clavulato-saccati (65-95 × 10-16 μ), octospori, antice obtusi, postice brevissime crasseque stipitati, paraphysibus densis filiformibus apice saepe subuncinatis v. ramulosis obvallati; iodi ope tunica ascorum vix coerulescit; sporidia elliptica v. ovoidea, utrinque obtusa (15-20 × 7-8 μ) recta v. vix inaequilateralia, non v. grosse 2-guttulata, hyalina.

Hab. In trunco fagineo emortuo indurato prope *Slogget bay,* Jun. 1882.

Obs. Species *Pr. fagineae* Karst. peraffinis, satis tamen distincta.

251. Ocellaria aecidioides Speg. (n. sp.)

Diag. Cupulae sparsae v. laxe gregariae, primo globosae tectae, dein erumpentes non v. vix exertulae, ore rotundae (450-600 μ), margine latiusculo albo fimbriatulo cinctae, epithecio impresso cinereo-glauco plano ornatae; asci obovati, antice late obtuseque rotundati crassissime tunicati, postice brevissime crasseque pedicellati, octospori, paraphysibus densis filiformibus apice

coalescentibus olivascentibusque obvallati; iodi ope asci et paraphyses, apice praecipue, intense coerulescunt; sporidia elliptica, utrinque obtusiuscula (15-17 × 9 μ), crasse tunicata, hyalina.

Hab. Ad palos fagineos decorticatos in tuguriis incolarum prope *Ushuvaia*, Maj. 1882.

Obs. Species pulchella *Aecidiis* habitu simillima, sporidiorum fabrica lichenina, thallo gonidiisque tamen non visis.

352. Stictis radiata (L.) Pers. — Obs. II, p. 73.

Hab. Non rara in ramilis emortuis *Senecii, Chiliotrichi, Mayteni* in *Fuegia* tota, hiem 1882.

Obs. Inter specimina fuegiana 3 formae distinguendae sunt:

a) Cupulae crassiuscule marginatae fimbriatae albae, disco glaucescente; asci cylindracei, apice rotundati subcrasse tunicati non foveolati (200 × 12 μ) densiuscule paraphysati; sporidia cylindracea, utrinque obtusa, dense septulata (180 × 3-4 μ), hyalina.

b) Cupulae crassiuscule marginatae subfimbriatae albae, disco cinerascente; asci fusoideo-cylindracei, apice truncato-rotundati crassissime tunicati majuscule 1-foveolati (150-180 × 6-7 μ) densissime paraphysati; sporidia filiformi-clavulata, apice obtusata, basi acutata (120-130 × 2-3 μ), dense multiseptata, hyalina.

c) Cupulae crassiuscule marginatae integrae albae, disco sordide melleo; asci cylindracei, apice rotundati crasse tunicati non foveolati (230-250 × 6 μ) parce paraphysati, octospori; sporidia filiformia, utrinque acutata (200-210 × 2 μ), obscure multiseptata, hyalina. An species distincta?

353. Stictis lichenoides Speg. (n. sp.)

Diag. Cupulae sparsae v. hinc inde 2-20-gregariae saepe

subconfluentes, matrice nuda v. macula alba farinoso-furfuracea obducta insidentes, primo globulosae clausae, dein discoideo-apertae (0,5‴ diam.), margine prominulo candido non v. vix lacinato, disco impresso minutissimo fuscidulo instructae; asci cylindracei, apice acutato-rotundati crasseque tunicati minute 1-foveolati, deorsum brevissime crasseque attenuato-pedicellati (75-80 × 5 μ), paraphysibus filiformibus densiusculis non v. vix longioribus subcoalescentibus obvallati, octospori; sporidia ascorum longitudine, filiformia flexuosa fasciculata tenuissima (0,5–0,8 μ crass.), hyalina, dense subimperspicueque guttulata.

Hab. Ad truncos fagineos denudatos induratosque in *Staten island,* Mart. 1882.

Obs. Species summopere lichenibus affinis, gonidiis tamen deficientibus ac iodi ope nulla!

354. STICTIS PUSILLA Speg. (n. sp.)

Diag. Cupulae sparsae immersae, primo globulosae tectae, dein erumpentes (350-500 μ), margine prominulo candido non v. vix laciniato cinctae, disco aurantiaco impresso donatae; asci cylindraceo-fusoidei, antice truncato-rotundati tenuiter tunicati, deorsum breviter crassiusculeque pedicellati (80-95 × 5-6 μ), octospori, paraphysibus paucis filiformibus non v. vix longioribus obvallati; sporidia filiformia ascorum longitudine utrinque obtusiuscula (70-90 × 1 μ), dense minuteque guttulata, hyalina. Iodi ope nulla.

Hab. Ad culmos dejectos putrescentes *Rosthkoviae grandiflorae* in *Staten island,* Mart. 1882.

355. STICTIS ARUNDINACEA Pers. — Myc. eurp. I, p. 336.

Hab. In foliis dejectis putrescentibus *Poae Forsteri* in scopulosis prope *Port Cook* in *Staten island,* Febr. 1882.

Obs. Specimina fuegiana a typo nonnihil recedunt; cu-

pulae sparsae, primo globosae tectae, dein erumpentes epidermide laciniata cinctae, minutae (300-350 μ) coriaceo-membranaceae, margine orali albicante non v. vix prominulo integro instructae, extus atrae v. olivascentes, contextu opaco indistincto, intus disco griseo-glaucescente donatae; asci cylindracei apice rotundati crassissime tunicati longiuscule 1-foveolati (fere glandiformes), deorsum brevissime attenuato-pedicellati (130-150 × 4-5 μ), paraphysibus filiformibus guttulatis dense obvallati; sporidia filiformia (150 × 1 μ), multiseptata, hyalina, saepe in articulis subsecedentia. Iodi ope nulla.

356. Xylographa parallela Fr. — Fuck., Symb. myc. p. 252.

Hab. In ramis emortuis decorticatis subputrescentibus *Libocedri tetragonae* in *Schyring island*, Febr. 1882.

357. Trochila Winterii Speg. (n. sp.)

Diag. Cupulae epiphyllae laxe gregariae innatae, primo tectae dein laciniato-erumpentes (250-300 μ), atrae subnitentes glabrae coriaceo-membranaceae, epithecii contextu indistincto opaco fuligineo; asci subcylindracei v. obclavati, antice obtussissime lateque rotundati crassiuscule tunicati, postice subcoarctati, pedicello crasso brevissimo noduloso suffulti (40-50 × 10-12 μ), paraphysibus paucis crassiusculis obvallati, octospori; iodi ope ascorum obturaculus intense coerulescit; sporidia recte v. oblique disticha, ovoidea, utrinque obtusa (12-13 × 5 μ), granuloso-farcta, hyalina, continua. An postremo 1-septata?

Hab. Ad folia dejecta putrescentia *Drymidis Winterii* in *Staten island,* Mart. 1882.

358. Lecanidion atrum Rbh.— Fuck., Symb. myc. p. 266.

Hab. Ad truncos decorticatos induratosque *Fagorum* in *Ushuvaia,* Jun. 1882.

Obs. Asci cylindracei v. subclavulati (80-85 × 14-15 μ); sporidia clavulata (30-40 × 7 μ), 7-septata non constricta hyalina. Ascorum tunica apice, iodi ope, vix coerulescens.

359. Lecanidion antarcticum Speg. (n. sp.)

Diag. Cupulae sparsae v. hinc inde laxe gregariae sessiles erumpenti-superficiales, primo clausae subhysterioideae dein applanato-apertae, subdiscoideae v. ellipticae (0,5-1‴) atrae glabrae coriacellae, contextu indistincto opaco, crassiuscule submarginatae, in sicco saepe contractulae v. contortae; asci cylindraceo-clavati, antice obtuse rotundati crasseque tunicati, postice longiuscule attenuato-pedicellati (p. sp. 100 × 14 μ — ped. 10-20 × 5 μ), paraphysibus densis filiformibus apice coalescentibus fuscescentibusque obvallati, octospori; sporidia oblique monosticha, clavulata, antice obtusata, postice attenuato-acutata (35-42 × 5-6 μ), curvula, 5 (rarius 7-) septulata, non constricta, hyalina.

Hab. In ramulis emortuis v. languidis *Empetri rubri* et *Lebetanthi americani* in *Staten island* et prope *Hope harbour* in *Clarence island,* aest. et hiem. 1882.

360. Calycium magellanicum Speg. (n. sp.)

Diag. Ascomata gregaria, ligno dealbata insidentia, capitulo e globoso turbinato-hemisphaerico disco tumidulo pulverulento olivaceo v. ferrugineo-atro ornato minuto (300-400 μ), stipite longiusculo setaceo rigidulo fragili atro glabro (1-3‴ long. × 100-200 μ crass.) basi non v. vix incrassato suffulto donata; asci cylindracei, antice obtuse rotundati, postice in pedicello longiusculo attenuati (p. sp. 45-50 × 3 μ — ped. 20-25 × 1-1,5 μ), octospori, paraphysibus densis apice fuscescentibus

ac granuloso-coalescentibus obvallati; sporidia recte monosticha, cylindraceo-elliptica v. subconica, utrinque attenuato-obtusata (5-7 × 2 μ), olivacea.

Hab. Ad corticem crassiorem vetustum *Fagi obliquae* in sylvis prope *Slogget bay,* Jun. 1882.

MYXOMYCETEAE (Fr.) DBy.

361. Tilmadoche nutans (Pers.) Rost. — Sluzowc. p. 127.

Hab. Ad ramulos foliaque subputrescentia *Drymidis Winteri* prope *Port Cook* in *Staten island,* Febr. 1882.

Obs. Specimina fuegiana vix a typo recedunt sporidiis nonnihil minoribus 6-9 μ diam.

362. Badhamia hyalina (Pers.) Berk. — Linn. Tans. XXI, t. 19, f. 3.

Hab. Ad truncos fagineos muscosos subputrescentes in sylvis prope *Ushuvaia,* Maj. 1882.

363. Enteridium antarcticum Speg. (n. sp.)

Diag. Aetalium pulvinulatum planum irregulariter sublineare v. repandulo-subramulosum (3-14‴ long. × 3-5‴ lat × 0,5-1‴ crass.), sordide olivascenti-virescens, laeve; sporidia in glomerulis globulosis (20-30 μ diam.) conglutinata, hemisphaerica v. irregulariter angulosa (9-10 μ), ubique laevia, pallide virescentia.

Hab. Ad cortices v. lignos decorticatos muscosos in sylvis in *Burnt island,* Jun. 1882.

Obs. Vix ab *En. olivaceo* Ehrb. sporidiis laevibus differt.

364. Trichia fallax Pers. — Obs. I, p. 59.

Hab. In ligno decortico putrescente ac mucido *fagineo* in sylvis in *Staten island,* Febr. 1882.

365. Trichia fragilis (Sow.) Rostf. — Sluzowc. p. 246.
Hab. In trunco carioso putrescente *fagineo* in sylvis prope *Ushuvaia* et *Slogget bay*, hiem. 1882.

366. Hemiarcyria serpula (Scop.) Rost.— Sluzowc. p. 266.
Hab. Ad truncos ac ramos muscosos putrescentes in sylvis prope *Shammacus*, Maj. 1882.

FUNGI IMPERFECTI

SPHAEROPSIDEAE Lév.

367. Phyllosticta embotryi Speg. (n. sp.)
Diag. Maculae nullae v. hypophyllae fuscescentes indeterminatae; perithecia hypophylla in maculis laxe aggregata minuta globulosa (60-70 μ) epidermide velata tenui membranacea, circa ostiolum vix papillulatum atra subcarbonacea, caeterum pallide olivascentia, contextu parenchymatico; sporulae ellipticae v. ovoideae utrinque obtusiusculae (2,5-3 × 1,5-2 μ) hyalinae.
Hab. Ad folia languida *Embotryi coccinei* in *Aicina* insula, Maj. 1882.

368. Phyllosticta gunnerae Speg. (n. sp.)
Diag. Maculae nullae v. pallescentes indeterminatae; perithecia hinc inde laxe gregaria e lenticulari conoidea (80-100 μ) prominula atra glabra, ostiolo impresso latiusculo (10 μ diam.), circa ostiolum subcarbonacea, caeterum membranacea, contextu grosse parenchymatico donata; sporulae cylindraceae, utrinque subtruncato-rotundatae (2,5-4 × 1 μ), ac saepe minute 1-guttulatae rectae v. curvulae hyalinae.
Hab. Ad folia languida *Gunnerae magellanicae* in herbosis prope *Agaia* in *Hoste island*, Jun. 1882.

369. PHYLLOSTICTA HAMADRYADIS Speg. (n. sp.)

Diag. Maculae majusculae indeterminatae, superne sordide fuscescentes, inferne subcinerascentes; perithecia hypophylla in maculis laxe gregaria, e globoso lenticularia (90-120 μ), epidermide velata, tenui membranacea, ostiolo minutissimo vix papillulata, contextu grosse parenchymatico olivaceo donata; sporulae cylindraceae v. elliptico-elongatae utrinque obtusiusculae (2-4 × 1 μ) ac saepe 1-guttulatae, rectae v. curvulae, hyalinae.

Hab. In foliis languidis v. emortuis *Hamadryadis magellanicae* in summis montibus prope *Port Cook* in *Staten island*, Febr. 1882.

370. PHYLLOSTICTA MAYTENI Speg. (n. sp.)

Diag. Maculae arescenti-albae amphigenae determinatae, linea stricta rufescente cinctae; perithecia innato-immersa lenticularia majuscula (200-250 μ) coriacella, ostiolo vix papillulato, contextu densissime subimperspicueque parenchymatico fusco donata; sporulae ellipticae v. ovoideae utrinque acutiusculae (6-9 × 2-3 μ) ac saepe 1-guttulatae, sterigmatibus breviusculis (6-10 × 1,5-2 μ) suffultae, hyalinae.

Hab. Ad folia languida *Mayteni magellanicae* in sylvis prope *Shammacus* et in *Picton island*, Maj. 1882.

Obs. Perithecia in parte infera tenuissime membranacea subevanida, an dimidiata?. Sporulae per aetatem saepe medio 1-septulatae.

371. PHYLLOSTICTA MAGELLANICA Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla laxe gregaria immerso-prominula epidermide velata e globoso lenticularia (120-150 μ) atra coriacella glabra, ostiolo non v. vix papillulato, contextu densissime parenchymatico saepe subindistincto donata; sporulae elliptico-

cylindraceae utrinque plus minusve acutato-rotundatae (4-6 × 1,5-2,5 μ) eguttulatae hyalinae.

Hab. In foliis dejectis *Ribis magellanicae* in *Picton island*, Maj. 1882.

372. Phyllosticta ribis Speg. (n. sp.)

Diag. Maculae amphigenae irregulariter rotundatae parvulae (2-5''' diam.) determinatae sordide rufescentes; perithecia epiphylla, laxissime gregaria pauca innato-prominula globoso-conoidea (80-90 μ) atra tenui membranacea, ostiolo minutissimo impresso pertusa, contextu majuscule parenchymatico donata; sporulae elliptico-subglobosae, utrinque obtusae (3-4,5 × 2-2,5 μ), eguttulatae, hyalinae.

Hab. Ad folia languida *Ribis magellanicae* in *Staten island* et prope *Ushuvaia*, Mart. et Maj. 1882.

373. Phyllosticta rosthkoviae Speg. (n. sp.)

Diag. Maculae nullae v. apicales pallescentes; perithecia laxissime gregaria immersa epidermide velata e lenticulari globosa (80-90 μ) atra glabra membranaceo-coriacella, ostiolo impresso minutissimo, contextu densiuscule parenchymatico parum distincto fusco-atro donata; sporulae cylindraceae v. subfusoideae utrinque acutiuscule rotundatae (3-4 × 0,8 μ), rectae v. curvulae, eguttulatae, hyalinae.

Hab. In culmis languidis *Rosthkoviae grandiflorae* in *Staten island*, Mart. 1882.

374. Phyllosticta violae Desm. — Sacc., Syll. III, p. 38.

Diag. In foliis languidis *Violae magellanicae* prope *Port Cook* in *Staten island*, Febr. 1882.

Obs. Maculae orbiculares amphigenae, centro albae zona sordide fuscescente cinctae, parvulae (2-5''' diam.); perithecia laxe gregaria lenticularia (80-100 μ) immersa

tenuissime membranacea, contextu parenchymatico, ostiolo minutissimo impresso pertusa; sporulae elliptico-cylindraceae utrinque acutiuscule rotundatae (5-7 × 2-3 μ), eguttulatae, hyalinae.

375. PHYLLOSTICTA WINTERII Speg. (n. sp.)

Diag. Maculae orbiculari–expansae majusculae (1–3″ diam.) saepius concentrice rugulosae subdeterminatae amphigenae, superne e nigricante cinerascentes inferne glaucescenti-roseae v. cinereae; perithecia amphigena sparsa immersa vix prominula olivacea minuta (50–60 μ) membranacea, ostiolo minutissimo impresso perforata, contextu parenchymatico fusco donata; sporulae elliptico-cylindraceae utrinque obtuse rotundatae (4,5 × 1,5-2 μ) ac saepe 1-guttulatae, hyalinae.

Hab. Ad folia languida *Drymidis Winterii* in *Staten island*, Mart. 1882.

376. PHOMA ANTARCTICA Speg. (n. sp.)

Diag. Maculae nullae; perithecia hypophylla hinc inde dense aggregata immersa epidermide velata parum prominula ac perspicua subglobosa (180-220 μ) atro–olivacea, ostiolo minuto impresso, contextu densissime parenchymatico subimperspicuo olivaceo–fuligineo donata; sporulae ellipticae v. subcylindraceo-fusoideae, utrinque plus minusve rotundato-acutatae (2-4 × 0,7-1 μ) grosse 2-guttulatae hyalinae, sterigmatibus conoideo-cylindraceis (10 × 1-2 μ) suffultae.

Hab. Ad folia languida *Fagi betuloidis* in *Staten island*, Febr. 1882.

377. PHOMA DESOLATIONIS Speg. (n. sp.)

Diag. Maculae nullae; perithecia globulosa (80-90 μ) hinc inde dense ac subbotryose aggregata, primo epidermide tecta, dein erumpenti-denudata, atra subcarbonacea

glabra laevia, ostiolo minutissimo impresso, contextu indistincto donata; sporulae cylindraceae v. allantoideae, utrinque obtusae ac minute 1-guttulatae (2-3 × 0,5-0,8 μ), hyalinae.

Hab. In gallis ramulorum *Fagi betuloidis* in *Fuegia* prope *Brecknok pass,* Maj. 1882.

378. Phoma drymidis Speg. (n. sp.)

Diag. Maculae nullae v. vix pallescentes epiphyllae indeterminatae; perithecia sparsa immersa, primo tecta dein erumpenti-prominula, globulosa (110-120 μ) subastoma coriacea atra glabra, contextu subindistincto olivaceo donata; sporulae lanceolatae v. fusoideo-ovatae, superne acutissimae, inferne obtusiusculae (9-11×2,5-3 μ), eguttulatae, hyalinae, sterigmatibus longiusculis (10-15 × 1-1,5 μ) simplicibus suffultae.

Hab. Ad folia languida *Drymidis Winterii* in *Staten island,* Mart. 1882.

379. Phoma fuegiana Speg. (n. sp.)

Diag. Maculae nullae; perithecia densiuscule sparsa v. subseriata atra glabra globoso-lenticularia (140-160 μ) membranaceo-coriacella, ostiolo minutissimo papillulato, contextu parenchymatico olivaceo donata; sporulae ellipticae v. ovoideae utrinque attenuato-rotundatae (4-5 × 1-2 μ) ac saepe 1-guttulatae, rectae v. inaequilaterales hyalinae, sterigmatibus minutissimis vix papillulatis suffultae.

Hab. Ad culmos vaginas foliaque emortua *Poae Forsteri,* in *Staten island,* Mart. 1882.

380. Phoma glacialis Speg. (n. sp.)

Diag. Perithecia sparsa, primo epidermide tecta dein nuda, globosa v. conoideo-lenticularia (180-220 μ) atra glabra coriaceo-membranacea, ostiolo non v. vix papillulato per-

tusa, contextu subindistincto parenchymatico fuligineo donata; sporulae ellipticae utrinque obtusiusculae (2-3 × 1 μ) ac 1-guttulatae, rectae v. inaequilaterales, hyalinae.

Hab. Ad caules emortuos *Cardaminis geraniifoliae* var. *glacialis* in alpinis prope *Port Cook* in *Staten island*, Mart. 1882.

381 PHOMA IAGANICA Speg. (n. sp.)

Diag. Maculae nullae; perithecia densiuscule gregaria, epidermide tecta prominula e globoso lenticularia (200-220 μ), ostiolo exertulo crassiusculo ac longiuscule papillato coronata, atra glabra membranaceo-coriacea, contextu densissime parenchymatico subimperspicuo atro-fuligineo donata; sporulae cylindraceae v. ellipticae, utrinque acutatae v. rotundatae (2,5-4 × 1-1,5 μ) ac minute 1-guttulatae, hyalinae.

Hab. In leguminibus aridis *Viciae magellanicae* in herbosis prope *Ushuvaia*, Maj. 1882.

382. PHOMA INSULARIS Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa, parenchymate immersa, epidermide tecta dein saepius laciniatim v. suboperculatim erumpentia globulosa (130-180 μ) atra crasse coriaceo-membranacea, ostiolo non v. vix papillulato, contextu indistincto donata; sporulae ellipticae v. ovoideo-sublanceolatae, saepius utrinque longiuscule acutato-obtusatae, non v. medio 1-guttulatae (5-7 × 1,5 μ) hyalinae, sterigmatibus filiformibus (12-15 × 1 μ) suffultae.

Hab. Ad folia dejecta *Berberidis ilicifoliae* in *Staten island*, Mart. 1882.

383. PHOMA PHILESIAE Speg. (n. sp.)

Diag. Maculae nullae v. pallescentes indeterminatae; perithecia epiphylla dense sparsa immersa epider–

mide tecta adnataque atra lenticularia (150-160 μ) laevia glabra coriaceo-membranacea, ostiolo minutissimo impresso, contextu indistincto donata ; sporulae cylindraceae v. cylindraceo-ellipticae utrinque obtuse rotundatae (18-21 × 5-6 μ), guttulatae v. granuloso-farctae, hyalinae.

Hab. Ad folia emortua *Philesiae buxifoliae* in *Basket island*, Jun. 1882.

384. Phoma symphyostemi Speg. (n. sp.)

Diag. Perithecia matrice late cinerascenti-nigrificata insidentia epidermide velata lenticularia (150-160 μ) coriacella atra glabra, ostiolo minuto non v. vix papillulato, contextu densissimo indistincto donata ; sporulae parvulae ellipticae utrinque obtusiusculae (2-3 × 1 μ) ac minute 1-guttulatae, saepius inaequilaterales hyalinae, sterigmatibus subconoideis crassiusculis (5-8 × 1,5 μ) suffultae.

Hab. Ad scapos emortuos *Symphyostemi narcissoidis* et *Sisyrinchii filifolii* prope *Shammacus* et *Punta anegada*, hiem. 1882.

385. Phoma Winterii Speg. (n. sp.)

Diag. Perithecia hinc inde 3-5-aggregata, globulosa (150-180 μ) cortice immersa, peridermio velata atra glabra coriaceo-subcarbonacea, ostiolo impresso perforata, contextu indistincto opaco donata ; sporulae cylindraceae, utrinque obtusae (3-5 × 0,8-1 μ), rectae v. curvulae, hyalinae.

Hab. Ad corticem ramorum emortuorum *Drymidis Winterii* in *Staten island*, Mart. 1882.

386. Aposphaeria citrispora Speg. (n. sp.)

Diag. Perithecia sparsa v. hinc inde 2-5-aggregata superficialia globulosa (180-200 μ) atra glabra subrugulosa

astoma? coriacea, contextu indistincto; sporulae ovoideo-v. globuloso-citriformes utrinque v. inferne tantum acutatae (10-13 × 7-9 μ) hyalinae, sterigmatibus clavulatis (10-15 × 1-2 μ) simplicibus suffultae, paraphysibus valde longioribus filiformibus obvallatae.

Hab. In schidiis fagineis vetustis in sylvis prope *Agaia* in *Hoste island,* Jun. 1882.

387. Aposphaeria clausa (Wint.) Speg. — Wint., Pilz. v. C. Horn, n. 9.

Hab. Vulgatissima ad ramos fagineos decorticatos in *Staten island* et *Fuegia,* aest. et hiem. 1882.

Obs. Sporulae cylindraceae utrinque obtusiusculae (3-7 × 1-2 μ) rectae v. vix curvulae hyalinae.

388. Aposphaeria pulchella Speg. (n. sp.)

Diag. Perithecia ligno denudato, extus cinerascenti-dealbato, intus roseo-virgatulo, laxe insculpta prominula conoidea (100-130 μ), ostiolo minuto papillulato ornata, coriaceo-membranacea, in sicco subcollabescentia atra glabra, contextu indistincto donata; sporulae cymbiformes, utrinque acutiusculae (3-4,5 × 1-1,5 μ), primo hyalinae dein fuscidulae.

Hab. Ad ramos emortuos decorticatos *fagineos* prope *Slogget bay,* Jun. 1882.

Obs. Species sporis fuscidulis genere *Coniothyrio* Cda. accedens.

389. Aposphaeria trivialis Speg. (n. sp.)

Diag. Perithecia hinc inde in ligno denudato dense gregaria saepius plagulas atras majusculas elongatas efficientia, globulosa (150-180 μ) atra glabra subcarbonacea, ostiolo minutissimo vix papillulato, contextu indistincto donata; sporulae ellipticae v. elliptico-cylindraceae utrinque obtusae (5-8 × 3 μ), hyalinae, eguttulatae.

Hab. In schidiis fagineis putrescentibus in *Staten island* et prope *Slogget bay,* Mart. et Maj. 1882.

390. Sphaeronema conicum (Tode) Fr. — Wint., Pilz. v. C. Horn, n. 13.

Hab. Non rarum in schidiis fagineis in sylvis prope *Ushuvaia,* Maj. 1882.

Obs. Sporulae subcylindraceae utrinque obtusiusculae (4-5 × 1,5 μ) hyalinae.

391. Dothiorella Winterii Speg. (n. sp.)

Diag. Stromata tuberculoso-subhemisphaerica (1-3‴ diam.), cortice insidentia, per peridermium erumpentia ac subsuperficialia, atra; perithecia in stromate peripherice constipata semiexerta globulosa (150-180 μ) atra glabra astoma subcarbonacea, contextu indistincto; sterigmata di-v. tri-cothoma (18-20 × 0,5-1 μ), ramulis saepius ovatis v. obclavatis apice acutis donata, hyalina; sporulae cylindraceae v. allantoideae, minutissimae (2-2,5 × 0,5-0,8 μ), hyalinae.

Hab. In ramis emortuis *Drymidis Winterii* prope *Port Cook* in *Staten island,* Mart. 1882.

Anthracoderma Speg. (n. gen.)

Diag. Stroma innato-superficiale atrum carbonaceum rigidum, loculis plus minusve prominulis denseque constipatis vestitum; sporulae elongatulae continuae hyalinae.

Obs. Genus singulare in *Cyttarieis* parasiticum.

392. Anthracoderma Hookeri Speg. (n. sp.)

Diag. Stroma atrum carbonaceum totam matricem crusta carbonacea fragili obtegens; loculi dense constipati globulosi (150-180 μ) vix prominuli rugulosi atri astomi? (an minute perforati?), contextu indistincto; sporulae

fusoideae utrinque attenuatae ac acutato-obtusatae (10-15 × 3-4 μ), inaequilaterales, non v. granuloso-farctae, hyalinae.

Hab. Ad *Cyttariam Hookeri* emortuam in ramulis fagorum in *Basket island*, Jun. 1882.

393. Anthrachoderma selenospermum Speg. (n. sp.)

Diag. Stroma saepius basin matricis tantum anulatim cingens, rarius per totam matricem diffusum tumidulum carbonaceum atrum glabrum; loculi ovoidei v. obovati, plus minusve exerti, (350-450 × 150–200 μ), sursum obtusi non v. vix ostiolato-perforati laevissimi glabri atri carbonacei, contextu indistincto; sporulae e strato proligero immediate oriundae, cylindraceae, falcatae v. uncinatae, utrinque obtusiusculae (12-20 × 2-2,5), granuloso-farctae, hyalinae.

Hab. Ad *Cyttariam Hookeri*? languidam in ramulis *Fagorum* prope *Agaia* et *Brecknok pass*, Jun. 1882.

394. Fuckelia? antarctica Speg. (n. sp.)

Diag. Stromata elliptica (2-5‴ × 1-2‴) densiuscule sparsa transverse erumpentia pulvinulata margine truncata rarius subeffusa, superne applanata non v. vix scrupuloso-rugulosa, coriaceo-carnosula ex atro v. fusco purpurascentia, contextu densissime parenchymatico plus minusve distincto; loculi dense constipati, non v. vix prominuli minuti (80-100 μ); sporulae globosae v. ovoideae (8-12 × 8-10 μ), inferne subapiculato-angulatae, crassiuscule tunicatae granuloso-farctae hyalinae, sterigmatibus filiformibus longiusculis (10-15 × 1-2 μ), concoloribus suffultae.

Hab. Ad ramos emortuos subputrescentes *Fagorum* in *Staten island* et prope *Ushuvaia*, Mart. et Jun. 1882.

Obs. Species statum spermogonicum *Cenangii australis* Speg. sistens, a genere satis tamen desciscens.

395. CYTISPORELLA? MACRORHYNCA Speg. (n. sp.)

Diag. Stromata hinc inde sparsa per peridermium tuberculose erumpentia (2-5‴) atra subcarbonacea; loculi distincti globulosi (400-450 μ), in ostiolo crasso longissimoque (0,5-1,5‴ × 300-400 μ) atro recto v. tortuoso apice truncato v. bulloso-inflato carbonaceo producti; sporulae cylindraceo-ellipticae utrinque truncatae v. rotundatae (2-2,5 × 1 μ) ac minute 1-guttulatae hyalinae, sterigmatibus filiformibus longiusculis (25 × 0,8-1 μ) suffultae.

Hab. In cortice vetusto subvivo *Fagi betuloidis* in *Staten island*, Mart. 1882.

396. CYTISPORELLA? ANTARCTICA Speg. (n. sp.)

Diag. Perithecia peridermio tecta, stromate nullo, sublibera valsiformiter aggregata atra subcarbonacea minuta (180-200 μ), ostiolis minutis conniventibus ac disculum peridermium perforantem non v. vix exertum efficientibus donata; sporulae minutae cylindraceae v. suballantoideae utrinque obtusae (2-3 × 0,8-1 μ), hyalinae.

Hab. Ad ramos emortuos *Ribis magellanicae* in sylvis prope *Ushuvaia*, Maj. 1882.

Obs. Statum spermogonicum *Kacosphaeriae antarcticae* Speg. sistens.

397. CYTISPORA ANTARCTICA Speg. (n. sp.)

Diag. Stromata minuta elliptico-scutata peridermio tecta (1–3‴) atra, centro papillata ac perforanti-exertula; loculi ovati (300-400 × 1 μ), radiatim dense constipati, ostiolis conniventibus atris subcarbonaceis; sporulae allantoideae plus minusve curvulae, utrinque acutiusculae (3-4 × 0,7-1 μ) ac minute 1-guttulatae, chlorinulae.

Hab. Ad ramulos emortuos *Fagi betuloidis* prope *Agaia* et in *Burnt island*, Jun. 1882.

398. Cytispora? durissima Speg. (n. sp.)

Diag. Stromata hinc inde per peridermium erumpentia, tuberculoso-difformia minuta (0,5-1 μ) atro-olivacea, cornea durissima glabra laevia v. subrugulosa, contextu carnosulo indistincto olivaceo; loculi periphaerici subglobosi (80-100 μ) immersi albo-farcti; sporulae cylindraceae, utrinque plus minusve obtusatae (3-5 × 1 μ), hyalinae, basidis filiformibus (10-20×1 μ) suffultae.

Hab. Ad ramos emortuos *Embotryi coccinei* in *Aicina* insula, Maj. 1882.

Obs. Species vulgatissima, rarissime tamen fertilis, fabrica nonnihil lichenina; gonidiis non visis!

399. Cytispora magellanica Speg. (n. sp.)

Diag. Stromata laxe sparsa, cortice insidentia, peridermio subrelaxato tecta e clipeato conoidea (1-1,5‴), centro papilla conico-cylindracea atra perforante non v. vix exerta ac truncata donata; loculi pauci subcircinati parvuli (150-180 μ) albo-farcti; sporulae allantoideae utrinque acutiuscule rotundatae (5 × 1 μ), plus minusve curvulae, hyalinae.

Hab. Ad ramos emortuos putrescentes *Ribis magellanicae* in *Hope harbour*, Maj. 1882.

400. Cytispora mayteni Speg. (n. sp.)

Diag. Stromata cortice innata tuberculoso-subeffusa, primo peridermio tecta dein latiuscule erumpentia, non v. vix exerta atra coriacella, contextu indistincto; loculi inordinati minuti saepius e mutua pressione difformes (90-120 μ) albo-farcti; sporulae allantoideae, utrinque obtusiusculae (6 × 1 μ), hyalinae.

Hab. Ad ramulos emortuos dejectos *Mayteni magellanicae* prope *Shammacus*, Maj. 1882.

401. Ceuthospora fuegiana Speg. (n. sp.)

Diag. Stromata innata densiuscule sparsa epi-v. hypophylla impressula irregulariter suborbicularia (1-3‴) determinata subcarbonacea atra glabra laevia tenuiuscula, centro loculis paucis (rarius 1) depressis anguloso-difformibus (150–250 μ diam.) albo-farctis donata; sporulae cylindraceae utrinque obtusae (12-15 × 2-2,5 μ) rectae, hyalinae non v. granuloso-farctae.

Hab. Ad folia dejecta putrescentia *Mayteni magellanicae* in sylvulis prope *Shammacus*, Maj. 1882.

402. Ceuthospora magellanica Speg. (n. sp.)

Diag. Stromata sparsa innata prominula saepius epiphylla, irregulariter suborbicularia (0,5-1‴), densiuscule sparsa, determinata subcarbonacea atra subnitentia, centro loculo unico (rarius 2-3) lenticulari (230-380 μ) albo-farcto irregulariter (an laciniatim?) dehiscente donata; sporulae cylindraceae utrinque obtusae (10-14 × 2,5 μ) rectae, hyalinae.

Hab. Ad folia dejecta putrescentia *Berberidis buxifoliae* in dumosis prope *Ushuvaia*, Maj. 1882.

403. Coniothyrium fuegianum Speg. (n. sp.)

Diag. Perithecia minuta lenticulari-globosa (120-150 μ) atra glabra hinc inde sparsa v. 3-8-seriata immersa v. vix prominula membranacea, epidermide parum circum circa infuscata tecta adnataque, ostiolo minuto papillulato lato (20 μ) non v. vix subexerto, contextu dense parenchymatico olivaceo donata; sporulae e globoso ellipticae (4-6 × 3-4 μ) utrinque obtusae, rectae v. sub-inaequilaterales, olivaceae.

Hab. In foliis culmisque putrescentibus *Poae Forsteri* in *Chair island*, Maj. 1882.

404. Coniothyrium? hookeri Speg. (n. sp.)

Diag. Perithecia minuta lenticulari-globosa (100-120 μ)

innato-prominula non v. vix papillulato-ostiolata atro-olivacea carnosulo-membranacea, contextu dense parenchymatico subindistincto; sporulae ellipticae, globosae v. subcuboideae (6-10 × 5-6 μ) fuligineae (an catenulatae?).

Hab. In disco *Cyttariae Hookeri?* e ramulis fagineis vix erumpente, *Slogget bay,* Jun. 1882.

Obs. Species pulchella a genere nonnihil desciscens; an status spermogonicus ipsius Cyttariae?.

405. Harknessia antarctica Speg. (n. sp.)

Diag. Maculae nullae; acervuli minutissimi (150-250 μ), amphigeni immersi porose dehiscentes, cirrho nigricante ornati, pseudoperithecio substromatico olivaceo; sporulae ellipticae rectae (17-20 × 7-8 μ) apice acutiusculae non v. 1-guttulatae, basi cauda recta hyalina persistente cylindracea (12-15 × 1,5 μ) auctae.

Hab. Ad folia emortua *Fagi betuloidis* tuguria incolarum tegentia in *Burnt island,* Jun. 1882.

Obs. Forma hujus speciei ramulicola e *Basket island* etiam adest; acervuli majusculi (1-3‴) cortice innati primo peridermio tumefacto tecti, dein erumpentes, atro-cinnamomei stromate pluriloculari spurio donati; sporulae, ut in typo, sed paraphysibus filiformibus minutis obvallatae.

406. Harknessia fuegiana Speg. (n. sp.)

Diag. Maculae albae saepe totum folium ambientes determinatae, linea fuscescente cinctae; acervuli amphigeni laxe gregarii immersi conoideo-prominuli (300 μ), apice porose dehiscentes, pseudoperithecio subparenchymatico tenuissimo olivaceo vix evoluto donati; sporulae ellipticae (20-24 × 11 μ) apice obtusiusculae, grosse 1-guttulatae, rectae, basi cauda clavulata (18-20 × 3 μ) hyalina flexuosula auctae.

Hab. Ad folia languida *Mayteni magellanicae* in *Picton island,* Maj. 1882.

407. Darluca filum (Biv.) Cast. — Sacc., Syll. vol. III, p. 416.

Hab. Ad spiculas *Agrostidis magellanicae* ab *Anguillula tritici* infectas in herbosis montanis prope *Port Cook* in *State island,* Mart. 1882.

Obs. Sporulae ellipticae v. ovatae rarius subbiconicae, medio 1-septatae, non v. vix constrictulae, utrinque mucoso-penicillatae non v. minute 1-guttulatae (12-13 × 3-3,5 μ), hyalinae.

408. Diplodina? verruculosa Speg. (n. sp.)

Diag. Perithecia erumpenti-superficialia, hemisphaerico-globulosa (200-250 μ), densiuscule gregaria v. seriata, minute denseque verruculosa atra astoma v. irregulariter dehiscentia?, membranaceo-coriacella, contextu parenchymatico pellucido fuligineo; sporulae cylindraceae, utrinque obtusiusculae (8-12 × 1-1,5 μ) rectae v. subcurvulae, hyalinae.

Hab. Ad culmos dejectos putrescentes *Tritici secundi* in marittimis prope *Shammacus,* Maj. 1882.

409. Staganospora chiliotrichi Speg. (n. sp.)

Diag. Perithecia sparsa epiphylla immersa non v. vix prominula lenticularia (80-90 μ) tenui membranacea, contextu dense parenchymatico, ostiolo minuto impresso perforata; sporulae cylindraceae utrinque obtusiusculae (15-20 × 2,5 μ), rectae v. leniter inequilaterales, triseptatae non constrictae, hyalinae.

Hab. Ad folia emortua *Chiliotrichi amelloidis* in pratis prope *Penguin rookery* in *Staten island,* Febr. 1882.

410. Staganospora insularis Speg. (n. sp.)

Diag. Perithecia minutissima densiuscule gregaria ac subseriata lenticularia (80-90 μ) tenui membranacea, contextu parenchymatico fuligineo, ostiolo latiusculo (15 μ) impresso perforata; sporulae cylindraceae v. subclavulatae, utrinque obtusissimae (18-24 × 3 μ), rectae v. flexuosulae, 3-(rarius 4-) septulatae non constrictae, hyalinae v. perdilute chlorinulae.

Hab. In foliis emortuis *Agrostidis magellanicae* in collinis prope *Port Cook* in *Staten island*, Mart. 1882.

411. Staganospora oxyspora Speg. (n. sp.)

Diag. Perithecia amphigena sparsa v. gregaria ac seriata, parenchymate immersa globulosa (90-100 μ) tenui membranacea atra glabra parenchymatica, ostiolo minuto impresso donata; sporulae fusoideae utrinque attenuato-acutatae (24-28 × 3-5 μ), rectae v. subsigmoideae, 5-septatae non constrictae, hyalinae.

Hab. In foliis emortuis *Hierochloae antarcticae* in pratis prope *Port S. John*, Febr. 1882.

412. Camarosporium antarcticum Speg. (n. sp.)

Diag. Perithecia hinc inde pauci-aggregata, cortice stromatice infuscato v. nigrificato innata, primo peridermio tecta, dein erumpentia globosa (180-220 μ) atra glabra, papillulato-ostiolata, carnosulo-membranacea, contextu indistincto; sporulae ovoideae, utrinque obtusiusculae (18-22 × 6-7 μ), rectae v. subinaequilaterales, horizontaliter 3-4-5-septatae non constrictae (vix in senectute), loculis 1-2-centralibus septo altero verticali v. obliquo rarius deficiente percursis, fuligineis, loculis extimis pallidioribus.

Hab. Ad ramulos dejectos emortuos *Berberidis ilicifoliae* in *Staten island,* Mart. 1882.

413. Cytosporium? fuegianum Speg. (n. sp.)

Diag. Perithecia in matrice late infuscata v. nigrificata superficialia globoso-depressa (250 μ) atra subcarbonacea, primo pilis cylindraceis acutis continuis opacis fuligineis basi non incrassatis saepeque subcoespitulosis (20-80 × 5-7 μ) laxe vestita, dein glabrata, ostiolo non v. vix papillulato-donata, contextu indistincto; sporulae ellipticae, utrinque acutiuscule rotundatae (18-20 × 4-6 μ), horizontaliter 3-5-(rarius 7-) septatae, ad septa validule constrictae, loculis 2-3 (rarius 0) centralibus septo altero continuo donatis, griseo-fuligineae.

Hab. Ad lignum decorticatum putrescens *Libocedri tetragoni* et *Fagi* cujusdam prope *Port Tom* in *Schyring island*, Jun. 1882.

Obs. Species notis fructificationis ac sterigmatibus deficientibus nonnihil dubiosa. An ascigera ?.

414. Septoria antarctica Speg. (n. sp.)

Diag. Maculae amphigenae pallescentes orbiculares (1-3‴) determinatae; perithecia centro pauci-aggregata immersa lenticularia (60-90 μ) tenuissime membranacea, contextu parenchymatico vix perspicuo pallide olivaceo, ostiolo impresso minuto donata; sporulae filiformes utrinque obtusiusculae (30-40 × 1 μ) rectae v. flexuosulae, minute denseque guttulatae (an septulatae?), hyalinae.

Hab. Ad folia languida *Chrysosplenii macranthi* in *Picton island*, Maj. 1882.

415. Septoria apiicola Speg. (n. sp.)

Diag. Maculae amphigenae irregulares (2-8‴) centro albicantes, inferne indeterminatae, superne determinatae ac zonula obscuriore cinctae; perithecia centralia pauca laxe aggregata prominula atra lenticularia (60-80 μ) tenui membranacea, contextu parenchymatico olivascente, ostiolo minuto impresso donata; sporulae

filiformes utrinque acutiusculae (30-45 × 1,5 μ), 3-7-septatae, non constrictae, flexuosulae, hyalinae.
Hab. Ad folia viva v. languida *Apii australis* ubique in *Staten island* et *Fuegia*, aest. et hiem. 1882.

416. Septoria ? fagicola Speg. (n. sp.)
Diag. Perithecia erumpenti-superficialia innata sparsa amphigena globuloso-depressa (180-200 μ) atra glabra subcarbonacea, contextu indistincto, astoma? per aetatem lacero-dehiscentia, ac saepius sporis exilientibus griseo-pruinulosa; sporulae cylindraceae utrinque acutiusculae (18-25 × 2-2,5 μ), continuae, rectae, hyalinae.
Hab. Ad folia viva v. languida *Fagi betuloidis* in sylvis in *Fuegia* prope *London island,* Mart. 1882.
Obs. Species a genere nonnihil deflectens, nunc *Phomam* nunc *Rhabdosporam* accedens.

417. Septoria macrosperma Speg. (n. sp.)
Diag. Perithecia dense seriata immersa epidermide infuscata tecta globulosa (100-110 μ) atra coriaceo-membranacea, ostiolo papillulato coronata, contextu indistincto fuligineo; sporulae filiformi-subclavulatae, apice obtusiusculae, inferne acutiusculae (70-85 × 1-2 μ), 7-9-septatae, non constrictae, hyalinae.
Hab. Ad folia emortua *Poae Forsteri* in scopulosis prope *Staten island,* Mart. 1882.

418. Septoria mayteni Wint.—Pilz. v. C. Horn., n. 11.
Hab. Ad folia dejecta putrescentia *Mayteni magellanicae* in sylvis prope *Shammacus,* Maj. 1882.
Obs. Specimina mea nonnihil a typo recedunt. Maculae nullae v. totum folium expallescens; perithecia epiphylla saepius densissime aggregata, erumpenti subsuperficialia atra globulosa (80-100 μ) astoma? rugu-

losa coriacella, contextu subopaco grosse parenchymatico; sporulae cylindraceae, utrinque rotundato-subtruncatae (15-25 × 2,5-3 μ), pluriguttulatae, saepe centro 1-septatae, non constrictae, hyalinae, rectae v. leniter curvulae.

419. Septoria? maytenicola Speg. (n. sp.)

Diag. Maculae nullae; perithecia immersa vix prominula, hinc inde densiuscule aggregata, lenticularia (150-180 μ) atra glabra subcarbonacea, contextu indistincto, ostiolo vix papillulato pertusa; sporulae cylindraceae, superne rotundatae, inferne acutatae (12-14 × 1-1,5 μ), continuae rectae hyalinae, sterigmatibus brevissimis papillaeformibus suffultae, paraphysibus filiformibus dense ramulosis obvallatae.

Hab. Ad folia dejecta putrescentia *Mayteni magellanicae* in sylvis prope *Shammacus*, Maj. 1882.

420. Septoria paraphysoides Speg. (n. sp.)

Diag. Maculae nullae sed matrix tota expallens; perithecia sparsa folii- v. cauli-cola lenticularia (60-80 μ) immersa, tenuissime membranacea, contextu dense parenchymatico fuligineo, ostiolo minuto impresso pertusa; sporulae cylindraceae, utrinque obtusae (35-40 × 1,5 μ), flexuosulae, 1-3-septatae, non constrictae, hyalinae, corpusculos obovatos minutos (an ascos immaturos?) obvallantes.

Hab. Ad folia cualesque emortua *Stellariae debilis* in herbosis prope *Shammacus*, Maj. 1882.

421. Septoria triseti Speg. (n. sp.)

Diag. Maculae parvulae sublineares tumidulae dilute cinerascentes indeterminatae; perithecia dense aggregata globulosa (70-80 μ) subseriata atra tenui membranacea ostiolato-pertusa, contextu parenchymatico

olivascente; sporulae filiformes utrinque acutiusculae (20-30 × 1-1,3 μ), continuae flexuosulae hyalinae.

Hab. Ad folia languida *Triseti phleoidis* et *Agrostidis magellanicae* in *Staten island*, Mart. 1882.

422. Septoria Websteri Speg. (n. sp.)

Diag. Maculae epiphyllae orbiculares, minutae (1-2‴) densiuscule aggregatae saepe confluentes determinatae pallide rufescentes; perithecia laxe aggregata immersa lenticularia (70-80 μ) tenuissime membranacea, contextu parenchymatico, ostiolo late impresso pertusa; sporulae cylindraceae, utrinque acutiuscule rotundatae (25-40 × 2-2,5 μ), rectae v. flexuosulae, 1-3-septatae non constrictae, hyalinae.

Hab. Ad folia viva v. languida *Senecionis Websteri* in *Port Vancouver* in *Staten island*, Mart. 1882.

423. Septoria? Winterii Speg. (n. sp.)

Diag. Maculae nullae; perithecia laxe sparsa epi- v. rarius hypophylla immersa vix prominula lenticulari-globulosa (200 μ) atra glabra coriacella, contextu indistincto, ostiolo vix papillulato perforata; sporulae cylindraceae utrinque rotundatae (20-25 × 2-2,5 μ) continuae, hyalinae, rectae, sterigmatibus obovatis breviusculis (8-10 × 3-5 μ) bisporis suffultae.

Hab. Ad folia dejecta *Drymidis Winterii* in sylvis prope *Shammacus* et in *Staten island*, Mart. et Maj. 1882.

Obs. Species inter *Phomam* et *Rhabdosporam* nutans. An huc *S. drymidis* Mntgn. in Gay., Fl. Chil. vol. VII, p. 493?

424. Septoria violae West.— Sacc., Syll. III, p. 518.

Hab. Ad folia languida *Violae magellanicae* in herbosis marittimis prope *Port Cook* in *Staten island*, Mart. 1882.

Obs. Maculae amphigenae orbiculares (1-4‴) determinatae pallide fulvescentes centro candidae; perithecia centro laxe pauci-aggregata atra innato-prominula lenticularia (60-80 μ) tenuissime membranacea, contextu densiuscule parenchymatico subindistincto fuligineo, ostiolo minuto impresso pertusa; sporulae filiformes, utrinque acutatae (20-40 × 1 μ), contiuuae v. imperspicue septulatae, rectae v. curvulae, hyalinae.

LEPTOSTROMACEAE Sacc.

425. Leptothyrium fuegianum Speg. (n. sp.)

Diag. Perithecia sparsa atra scutato-orbicularia (90-100 μ) tenui-membranacea, contextu laxe prosenchymatico-reticulato margine non v. vix denticulato dilute fuligineo, ostiolo latiusculo impresso pertusa; sporulae ellipticae, utrinque late rotundatae (2-3 × 0,8-1 μ), continuae, hyalinae.

Hab. Ad culmos emortuos *Rosthkoviae grandiflorae* in *Fuegia* prope *Chair island*, Maj. 1882.

Obs. Statum spermogonicum *Microthyrii fuegiani* Speg. sistit.

ERIOTHYRIUM Speg. (n. gen.)

Diag. Perithecia minuta scutato-dimidiata matrice adnata ostiolata, subiculo effuso tenuissimo fumagineo cincta; sporulae hyalinae, continuae.

426. Eriothyrium dubiosum Speg. (n. sp.)

Diag. Perithecia sparsa atra minutissima scutato-dimidiata (80 μ) tenuissime membranacea, contextu pellucido subprosenchymatico, ostiolo lato (20 μ) impresso pertusa, subiculo late effuso nigro-olivaceo submem-

branaceo ex hyphis crebre toruloso-articulatis, articulis subcuboideis (3-10 × 3-4 μ) grosse 1-guttulatis, efformato cincta; sporulae ellipticae v. ovoideae utrinque obtusiusculae (3-4 × 1 μ), rectae v. curvulae, hyalinae.

Hab. Ad folia viva v. languida *Pernettiae mucronatae* in *Staten island*, Mart. 1882.

427. Eriothyrium fuegianum Speg. (n. sp.)

Diag. Perithecia sparsa minuta scutato-dimidiata (120-140 μ) atra subcarbonacea, contextu indistincto vix margine pellucido ac prosenchymatico-radiante atro donata, ostiolo minutissimo perforata, subiculo late effuso submembranaceo atro, ex hyphis continuis rectiusculis densiusculis ramosis intricatis hinc inde hyphopodiis subglobosis v. ovoideis (3-5 μ) ornatis fuligineis composito cincta; sporulae cylindraceae utrinque obtuse rotundatae (10-11 × 1,5-2 μ), granuloso-farctae, continuae, hyalinae.

Hab. Ad basin culmorum languentium *Rosthkoviae grandiflorae* in *Staten island*, Mart. 1882.

428. Melasmia antarctica Speg. (n. sp.)

Diag. Maculae nullae; perithecia epiphylla innata atra nitentia orbicularia (0,8-1,2‴), in vivo subhemisphaerico-prominula, in sicco cupulato-collabescentia, sparsa v. rarius 1-2-aggregata coriacea contextu indistincto aterrimo; sporulae cylindraceae v. ellipticae, utrinque rotundatae v. truncatae (3-4 × 1 μ) ac minute 1-guttulatae, hyalinae v. subchlorinae.

Hab. Ad folia viva *Fagi antarcticae* var. *sublobatae* in montanis prope *Port Cook* in *Staten island*, Febr. 1882.

Obs. An melius *Placosphaeria*?

429. Melasmia escalloniae Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa epiphylla innata atra subnitentia orbicularia minutissima (180-250 μ) in vivo prominula, in sicco collabescenti-rugulosa, coriacella, contextu indistincto; sporulae globulosae (4-5 μ), granuloso-farctae, hyalinae.

Hab. Ad folia dejecta putrescentia *Escalloniae serratae* in sylvis prope *Shammacus*, Maj. 1882.

Cystothyrium Speg. (n. sp.)

Diag. Perithecia *Melasmiae* Lév. v. *Labrellae* Fr.; sporulae triseptatae, hyalinae.

430. Cystothyrium magellanicum Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa epiphylla innata atra subnitentia orbicularia minutissima (150-180 μ), in vivo prominula, in sicco subcollabescenti-rugulosa membranacea, contextu parenchymatico fusco; sporulae ellipticae, utrinque obtusiusculae (20 × 5 μ), rectae v. inaequilaterales, 3-septatae, non constrictae, hyalinae, loculis saepe per aetatem subsecedentibus.

Hab. Ad folia languida *Ribis magellanicae* in sylvis prope *Hope harbour* in *Clarence island*, Maj. 1882.

431. Cystothyrium sphaerelloide Speg. (n. sp.)

Diag. Maculae nullae v. totum folium expallens; perithecia hypophylla sparsa v. hinc inde 2-4-aggregata innata orbicularia (300-400 μ) atra, in vivo convexula, in sicco ruguloso-collabescentia, rimose dehiscentia glabra coriacella, contextu indistincto fuligineo; sporulae elliptico-cylindraceae, utrinque obtusiusculae (20-25 × 4 μ), rectae v. curvulae, 3-septatae, non constrictae, hyalinae.

Hab. Ad folia emortua adhuc pendula *Fagi obliquae* in sylvis prope *Ushuvaia,* Maj. 1882.

EXCIPULACEAE Sacc.

432. Dothichiza juncina Speg. (n. sp.)
Diag. Maculae nullae; perithecia erumpenti-tuberculosa subdifformia (500-650 μ), in vivo prominula, in sicco ruguloso-contractula, atra glabra coriacella, contextu indistincto opaco atro; sporulae densissime congloba-tae, elliptico-cylindraceae (3-5 × 1 μ) utrinque atte-nuato-rotundatae, curvulae, continuae, hyalinae.
Hab. Ad culmos languidos *Junci* cujusdam prope *Punta anegada* in *Freto magellanico,* Jul. 1882.

433. Amerosporium insulare Speg. (n. sp.)
Diag. Perithecia immersa seriata minuta (150-250 μ), primo epidermide tecta clausa, dein erumpenti-aperta margine ciliata, ciliis cylindraceis apice acutis basi non incrassatis 1-4-septatis non constrictis (50-100 × 6) fuligineis rectis v. flexuosulis, contextu parenchyma-tico-olivaceo donata; sporulae cylindraceae utrinque attenuato-acutatae (20-26 × 4-5 μ) ac curvulae, conti-nuae, hyalinae.
Hab. In culmis emortuis *Poae Forsterii* prope *Port Cook* in *Staten island,* Maj. 1882.

MELANCONIEAE Berk.

434. Coryneum opacum Speg. (n. sp.)
Diag. Acervuli cortice innati, primo peridermio tecti dein erumpentes, difformes (0,5-2‴) atri; sporulae clavula-tae, apice obtuse rotundatae, basi truncatae (90 × 24 μ),

rectae v. curvulae, primo pellucidae ac 3-5-septatae non constrictae, pedicello hyalino minuto mox fatiscente suffultae, dein opace atro-fuligineae.

Hab. Ad ramos emortuos *Fagi antarcticae* in sylvis prope *Ushuvaia*, Maj. 1882.

HYPHOMYCETEAE Mart.

435. Cylindrium fuegianum Speg. (n. sp.)

Diag. Pulvinuli superficiales effusi (2-3‴ diam.) sparsi v. laxe gregarii rarius confluentes compactiusculi aurantiaci v. flavescenti-carnei; conidia cylindracea, utrinque leniter attenuata ac truncata (15-20 $\times$ 1,5 μ), catenulata, continua (rarissime medio 1-septata non constricta), granuloso-farcta, hyalina v. subcarnea.

Hab. Ad folia dejecta putrescentia *Fagi betuloidis* in *Staten island* et *Fuegia*, aest. et hiem. 1882.

Obs. Species *C. flavo-virescenti* Ditm. peraffinis sed satis distincta.

436. Trinacrium minus Speg. (n. sp.)

Diag. Hyphae repentes hyalinae gracillimae (2-3 μ crass.) longiusculae parce septulatae ac ramosulae mox mucoso-diffluentes hyalinae; conidia sparsa vage inserta tri-radiata, radiis divaricatis apice attenuato-acutatis (20-25 $\times$ 2 μ), dense guttulatis, hyalina.

Hab. In *Fumagine pannosa* parasitica ad folia viva *Pernettiae mucronatae* in *Staten island*, Mart. 1882.

Obs. A *Tr. subtile* Rees an satis distinctum?

437. Aspergillus glaucus Lk. — Spec. I, p. 67.

Hab. Ad tubera putrescentia diu servata *Brassicae napi* in *Ushuvaia*, Maj. 1882.

438. PENICILLIUM GLAUCUM Lk. — Obs. I, p. 15.
Hab. Ad tubera putrescentia diu servata *Brassicae napi* in *Ushuvaia,* Maj. 1882.

439. BOTRYTIS CINEREA Pers. — Syn. p. 690.
Hab. Ad tubera putrescentia diu servata *Brassicae napi* in *Ushuvaia,* Maj. 1882.

440. TRICHODERMA VIRIDE Pers. — Syn. p. 230.
Hab. Ad palos fagineos putrescentes tuguriorum vetustorum incolarum in *Picton island,* Maj. 1882.

441. TORULA DARWINII Speg. (n. sp.)
Diag. Acervuli minuti superficiales globuloso-hemisphaerici (250-300 μ) atri compactiusculi dense sparsi; conidia globulosa (10-15 μ) grosse 1-guttulata laevia fuliginea, primo conglobata dein singulatim v. 2-3-tim secedentia.
Hab. Ad *Cyttariam Darwinii* putrescentem ac dejectam in sylvis prope *Penguin rookery* in *Staten island,* Febr. 1882.

442. CONIOTHECIUM ANTARCTICUM Speg. (n. sp.)
Diag. Acervuli minuti subglobosi (200-400 μ) erumpenti-superficiales densiuscule sparsi aterrimi compatiusculi; conidia polymorpha, 1–20–cellularia, cellulis globosis (3-5 μ) v. e mutua pressione angulosis saepius grosse 1-guttulatis crassiuscule tunicatis dense papilloso-verrucosis, fusco-atris.
Hab. Ad truncos decorticatos ac induratos *fagorum* in *Staten island,* Mart. 1882.

443. ARTHRINIUM USHUVAIENSE Speg. (n. sp.)
Diag. Acervuli erumpenti-superficiales minuti (400-500 μ) atri compactiusculi; hyphae cylindraceae rectiuscu-

lae simplices hyalinae v. fuscidulae graciles (2,5-3 μ), septis crassis nigris dense ornatae, articulis subcoarctatis 1-2-papillulato-nodulosis; conidia cymbiformia utrinque attenuata ac obtusa (16-19 × 5-6 μ), primo pellucida fuliginea, dein opaca-atra.

Hab. Ad folia languida v. emortua *Luzulae antarcticae* prope *Ushuvaia*, Maj. 1882.

444. Goniosporium punctiforme Speg. (n. sp.)

Diag. Maculae pallescentes amphigenae indeterminatae parvulae; acervuli minuti (350-550 μ) sparsi atri compactiusculi; hyphae cylindraceae fuscidulae (5-6 μ), crasse denseque nigroseptatae, mox diffluenti-evanescentes; conidia polymorpha, globulosa hemisphaerica trigona v. subcuboidea (10 × 7-10 μ), angulis saepius obtuse apiculatis, primo pellucida fuliginea, dein atra opaca.

Hab. Ad folia languida v. emortua *Caricis* cujusdam in uliginosis in *Gabel island*, Jun. 1882.

445. Cordella chaetomioides Speg. (n. sp.)

Diag. Pulvinuli hinc inde sparsi majusculi (1‴) laxe villosuli olivacei; hyphae steriles erectae flexuosulae longiusculae ac crassiusculae (200-950 × 5-10 μ), apice obtusae parce septatae olivaceae; hyphae fertiles sterilibus intermixtae, vix papillulato-prominulae, stratum proligerum tenuissimum submucoso-membranaceum efficientes; conidia globosa (12-15 μ), in sicco saepius dimidiato-collabescentia, grosse 1-guttulata, densissime minuteque asperula, subopace fuliginea.

Hab. Ad folia *Mayteni* ac graminacearum coacervata ac putrescentia in sylvis prope *Shammacus*, Maj. 1882.

Obs. Pulvinuli primo intuitu pro *Chaetomio* quodam facillime sumendi, lente tamen inspecti mox dignoscendi.

446. Cladosporium herbarum Lk.— Obs. II, p. 37.
Hab. Ad folia caulesque herbarum putrescentia ubique in *Staten island* et *Fuegia*, aest. et hiem. 1882.

447. Helminthosporium? bombycinum Speg. (n. sp.)
Diag. Pulvinuli late effusi crassiusculi gossypinulo-villosuli superficiales olivacei ; hyphae cylindraceae (5 μ), simplices flexuosulae dense intricatae, hinc inde parce noduloso-geniculatae fuligineae; conidia acro-pleurogena nodulis insidentia, cylindracea v. clavulata, longitudine varia (20-50 × 4-5 μ), dense septulata, ad septa non v. constricta, loculis subcuboideis, laevia catenulata atra.
Hab. Ad ramulos vivos *Pernettiae mucronatae* in sylvis prope *Agaia* in *Hoste island*, Jun. 1882.
Obs. Species habitu ac hypharum fabrica *Helminthosporio* Pers., conidiis autem catenulatis *Dendryphio* Wllr. accedens sed biogena; an huc *Antennaria scoriadea* Berk?

448. Heterosporium allii E. et M.—Sacc., Syll. IV, p. 480.
Hab. Ad folia putrescentia *Sisyrinchii* speciei cujusdam in pratis prope *Wallamatu*, Maj. 1882.
Obs. Hyphae erectae coespitulosae parcissime septatae cylindraceae, sursum attenuatae noduloso-geniculatae, apice cicatricosae (50-100 × 5-6 μ), intense fuligineae; conidia acro-pleurogena non v. subclavulata, utrinque obtusiuscula (20-30 × 7 μ) 1-3-septata, ad septa non v. vix constrictula, recta v. curvula, minute denseque granuloso-asperula, pallide roseo-fuliginea.

449. Heterosporium cercosporoide Speg. (n. sp.)
Diag. Maculae amphigenae pallide cinerascentes indeterminatae sparsae parvulae; hyphae coespitulosae cylindraceae rectae v. flexuosulae, apice obtusae (50-80 × 5-6 μ), 1-3-septulatae obscure fuligineae; coni-

dia acrogena elliptica crassa (20-25 × 8-10 μ), 1-2 septulata, non constricta, crasse tunicata, dense minuteque granuloso-asperula, pallide roseo-fuliginea.

Hab. Ad folia languida *Agrostidis magellanicae* in *Staten island*, Febr. 1882.

Obs. An satis ab *H. phragmitis* (Op.) Sacc. distinctum?

450. Cercospora epilobii Sch. — Sacc., Mich. II, p. 642.

Hab. Ad folia languida *Epilobii tetragoni* in pratis prope *Ushuvaia*, Maj. 1882.

Obs. Conidia cylindraceo-subclavulata (30-70 × 4-5 μ) hyalina v. subchlorina laevia.

451. Cercospora magellanica Speg. (n. sp.)

Diag. Maculae rufescentes parvulae (1-3‴) epiphyllae subdeterminatae sparsae; coespituli in maculis laxe gregarii v. hinc inde sparsi minuti olivacei; hyphae cylindraceae erectae, e nodulo parenchymatico minutissimo exsurgentes, rectae v. flexuosulae, apice obtusulae, 1-3-septatae, non constrictae (40-50 × 6 μ), pallide olivaceae; conidia acrogena obovata v. pyriformia, utrinque obtusiuscula (15-20 × 5-7 μ), pallide fuliginea, laevia, medio 1-septata, non v. vix constricta.

Hab. Ad folia languida *Ribis magellanicae* in *Picton island*, Maj. 1882.

452. Cercospora violae Sacc. — Fung. ven. V, p. 187.

Hab. Ad folia languida *Violae magellanicae* in *Staten island*, Febr. 1882.

453. Fumago pannosa (Berk.) Speg. — Mntg., in Gay, Fl. Chil. vol. VII, p. 495.

Hab. Vulgatissima ad folia, ramos ac truncos *Fagi betuloidis, Pernettiae mucronatae, Chiliotrichi amelloidis* et *Berberis ilicifoliae* in *Staten island* et *Fuegia* tota, aest. et hiem. 1882.

Obs. Hyphae torulosae crassae articulis globoso-depressis (5 μ long. × 5-12 μ lat.) atrae fuligineae ; perithecia adsunt immixta sterilia sparsa lenticularia (250-300 μ), contextu parenchymatico atro, ostiolo lato (25 μ) impresso pertusa.

454. GRAPHIUM? FUEGIANUM Speg. (n. sp.)

Diag. Stipites densiuscule gregarii saepe coespitulosi ac basi confluentes, cylindracei (0,5-1,5‴ alt. × 50-60 μ crass.), atri, basi non v. vix incrassati, apice penicillato-expansi, contextu fibroso-fasciculato fuligineo ; hyphae capituli graciles dense septulato-coarctatulae flexuosulae ramulosae, apice liberae ; conidia cylindracea v. elliptica, utrinque obtusissima (2 × 1 μ) ac minute 1-guttulata, hyalina v. subfumosa ; an catenulata ?

Hab. Ad lignum denudatum putrescens *Mayteni magellanicae* prope *Ushuvaia*, Maj. 1882.

455. TUBERCULARIA ANTARCTICA Speg. (n. sp.)

Diag. Sporidochia primo tecta, dein per peridermium erumpenti-exertula, tuberculoso-difformia (0,5-1,5‴) laevia glabra pallide testaceo-carnea ; conidia elliptica utrinque plus minusve rotundata (5-7 × 3-4 μ) ac saepe 1-guttulata hyalina.

Hab. Ad ramos emortuos *Berberidis ilicifoliae* in *Staten island*, Mart. 1882.

456. VOLUTELLA BOMBYCINA Speg. (n. sp.)

Diag. Sporidochia cupulato-applanata (400-750 μ) tenuia submembranacea superficialia late arcteque matrice adnata, gossypino-lanuginosa candida, pilis lamellosis involutis longe lineari-spathulatis (50-150 × 5-6 μ) apice applanatis irregulariter truncatis v. retusis hyalinis vestita ; conidia elliptica v. ovoidea utrinque acutissima (2,5-3 × 1 μ) ac minute 1-guttulata, hyalina,

sterigmatibus cylindraceis apice acutissimis (5 × 1-1,5 μ) hyalinis suffulta.

Hab. Ad folia emortua *Hierochloae antarcticae* prope *Penguin rookery* in *Staten island,* Febr. 1882.

457. Fusarium heterosporium Nees. — Nov. Act. n. c. IX, p. 135.

Hab. Vulgata ad *Sclerotium clavum* DC. in *Negri fiord* sub *M. Sarmiento,* Maj. 1882.

458. Epicoccum neglectum Dsm. —Ann. Sc. Nat. XVII, p. 95.

Hab. Ad folia culmosque putrescentes graminacearum in *Staten island,* Mart. 1882.

MYCELIA STERILIA

459. Anthina? muscigena Speg. — Fung. Arg. pug. IV, p. 133.

Hab. Vulgatissima ad muscos vivos in truncis ubique in *Staten island* et *Fuegia,* aest. et hiem. 1882.

460. Sclerotium clavus DC. — Fl. fr. VI, p. 115.

Hab. Ad ovaria *Phlei, Alopecuri, Tritici, Festucae, Hierochloae, Airae, Triseti* vulgatissimum in *Staten island* et in *Fuegia* tota, aest. et hiem. 1882.

461. Rhizomorpha subcorticalis Pers. — Syn. p. 704.

Hab. Ad truncos corticatos emortuos *Fagi* et *Berberidis* in *Staten island* et prope *Ushuvaia,* Mart. et Maj. 1882.

MONITUM.

Adde in Fung. pat. n. 12.

Hab. Ad truncos dejectos putrescentes *Berberidis ilicifoliae* in sylvis sub *M. Tarn,* Maj. 1882.

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EN

CÓRDOBA

(República Argentina)

Junio de 1888. — Tomo XI. — Entrega 3ª

La Correspondencia y Cange deberán ser dirigidos así :

Academia Nacional de Ciencias

CÓRDOBA

(República Argentina)

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Dr. D. Federico Kurtz.
Dr. D. Juan Frenzel

SECRETARIOS

Interno y de actas: **D. F. Alvarez Sarmiento.**
De correspondencia extrangera: **Dr. D. Federico Kurtz.**

COMISION REDACTORA

Dres. Oscar Doering, Luis Brackebusch, Adolfo Doering.

COMISION DE BIBLIOTECA

Dres. Oscar Doering, Federico Kurtz, Juan Frenzel.

AGENTES DE LA ACADEMIA NACIONAL DE CIENCIAS

Agente general: Librería de G. Deuerlich en Göttingen (Alemania).
Agentes: Buenos Aires, D. Ernesto Nolte, calle Cangallo.
Paris, Mr. H. Le Soudier, Libraire, Boulevard St. Germain 174 et 176.
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OBSERVACIONES METEOROLÓGICAS

PRACTICADAS

EN CÓRDOBA (REPÚBLICA ARGENTINA)

DURANTE EL AÑO 1886

POR

OSCAR DOERING

Las observaciones correspondientes al año 1887 se han hecho en la misma localidad y en las mismas condiciones que todos los años anteriores.

Como ántes, las he tomado personalmente, ayudado en los últimos meses del año por el señor D. FEDERICO MELTZER.

Habiéndose adquirido por la municipalidad de Córdoba y destinado para plaza pública la quinta del señor Dr. D. LUCAS GONZALEZ, en la que mis observaciones se hacian desde el año 1882, me he visto en la necesidad de interrumpirlas el 29 de Febrero de 1888, para continuarlas en la Oficina Central del Servicio Meteorológico de la Provincia, cuya direccion está á mi cargo.

Por esta razon añado, en un anexo, las observaciones de la temperatura del suelo correspondientes á Enero y Febrero de 1888, que se han hecho todavia en las condiciones y en el terreno de antes.

PRESION ATMOSFÉRICA (700 *mm.* + . . .)

CÓRDOBA, 1887

Tab. I, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	30.4	29.0	31.2	24.5	24.6	27.2	29.6	27.3	29.0
2	**31.7**	28.4	28.8	27.3	26.2	28.5	29.3	26.7	28.6
3	29.1	26.1	25.9	32.1	30.6	31.2	28.9	27.6	28.9
4	24.8	20.7	21.4	31.1	28.4	29.5	29.6	27.8	29.1
5	24.5	22.5	23.1	29.0	25.9	26.6	30.0	28.2	30.1
6	24.7	22.6	26.6	26.4	23.7	24.6	30.2	28.3	29.7
7	29.1	26.8	27.7	26.2	23.2	24.0	30.4	27.5	29.0
8	27.3	25.1	24.3	25.3	25.9	27.2	29.0	26.9	27.8
9	25.2	24.3	23.4	26.0	22.7	21.8	28.1	25.9	26.5
10	25.6	23.6	25.1	21.6	*19.2*	24.4	25.9	24.1	28.4
11	26.4	24.3	24.3	29.3	28.1	27.4	30.2	29.2	30.2
12	23.0	19.9	22.7	26.8	23.7	24.6	30.7	28.5	29.7
13	22.7	21.4	22.0	24.7	21.2	24.3	28.1	24.6	27.6
14	24.0	25.2	25.7	22.8	22.4	22.4	24.6	21.7	23.5
15	29.0	26.7	26.5	23.6	22.6	23.8	22.4	*19.4*	19.8
16	25.3	21.7	20.8	24.5	22.9	23.7	24.9	23.0	24.7
17	27.3	24.3	23.3	23.7	21.7	24.6	25.4	24.9	29.4
18	22.0	18.0	*17.1*	32.0	32.2	**33.5**	**31.3**	29.5	28.1
19	25.7	27.0	29.9	33.1	30.6	31.1	26.4	24.0	25.8
20	31.5	29.2	26.6	32.2	30.6	32.1	26.5	25.7	27.4
21	24.5	23.0	25.5	31.3	29.0	29.7	27.3	25.0	26.4
22	27.0	23.3	23.1	28.2	26.5	27.5	25.7	22.3	23.0
23	23.7	23.1	25.0	27.6	24.0	24.9	22.6	22.3	29.0
24	21.6	23.5	26.5	25.8	24.1	25.4	30.7	27.4	27.0
25	28.0	26.8	27.4	25.5	22.1	21.4	23.9	21.2	26.9
26	27.7	25.4	24.3	20.2	22.2	25.3	30.7	28.8	29.7
27	24.3	22.3	22.9	27.9	28.3	30.0	27.6	24.9	26.5
28	25.8	24.0	25.2	31.1	28.9	30.0	26.0	24.0	26.5
29	25.9	23.6	24.7				28.3	26.2	26.7
30	24.2	20.8	20.6				26.8	24.1	25.8
31	18.3	18.0	20.5				25.7	23.3	25.3
1–10	27.2	24.9	25.8	27.0	25.0	26.5	29.1	27.0	28.7
11–20	25.7	23.8	23.9	27.3	25.6	26.7	27.0	25.1	26.6
21–31	24.9	23.1	24.1	27.2	25.6	26.8	26.9	24.5	26.6
Promedio.	25.91	23.89	24.58	27.14	25.40	26.64	27.64	25.48	27.29

PRESION ATMOSFÉRICA (700 *mm.* + ...)

CÓRDOBA, 1887

Tab. I, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	27.0	24.2	26.3	31.5	28.2	27.6	30.0	27.1	28.0
2	28.7	26.4	27.9	26.5	24.4	26.3	26.5	23.8	24.3
3	27.5	28.6	30.3	27.2	24.3	24.8	22.0	19.6	20.6
4	30.0	27.8	29.0	28.5	28.9	33.7	26.3	27.1	28.3
5	28.0	25.3	27.6	37.5	36.0	38.1	27.1	25.6	26.4
6	32.9	32.7	34.4	38.2	36.1	37.2	24.5	21.4	22.6
7	34.0	30.9	31.2	35.4	32.6	33.0	22.0	23.3	26.1
8	29.3	26.1	27.0	30.1	27.1	28.1	25.0	24.6	29.6
9	26.4	22.4	23.9	28.1	28.4	30.0	29.8	26.7	26.2
10	27.8	33.2	29.9	30.1	29.6	31.7	21.3	17.4	18.1
11	29.5	29.1	33.6	30.3	28.2	29.4	*16.8*	17.8	24.6
12	34.1	30.7	29.8	29.4	28.3	31.0	30.6	30.7	31.3
13	27.0	23.9	25.7	32.8	32.0	33.1	29.0	26.5	28.1
14	26.2	24.7	28.1	32.1	29.3	30.5	25.9	23.0	24.8
15	28.0	24.6	24.5	30.5	30.0	32.4	27.4	25.7	27.8
16	25.9	29.0	31.4	32.3	32.7	34.9	27.7	24.1	25.0
17	31.0	27.6	27.9	34.6	32.7	35.0	27.2	26.3	27.5
18	27.4	25.5	27.9	33.7	30.3	30.1	25.4	23.4	26.2
19	28.6	26.5	27.7	27.7	27.0	27.6	25.7	23.9	25.1
20	28.1	27.0	28.3	26.9	24.3	24.8	24.5	22.5	26.2
21	27.3	24.9	26.6	24.4	*21.8*	23.5	29.6	29.8	32.7
22	26.8	28.2	29.5	25.2	24.7	28.6	31.9	28.6	27.0
23	28.2	26.5	29.7	28.1	27.5	30.7	23.7	22.2	24.1
24	28.3	23.5	25.0	34.0	32.8	33.3	23.6	20.5	22.2
25	28.2	26.3	24.9	32.7	30.9	31.9	23.5	22.5	24.7
26	19.3	*15.7*	24.9	30.1	27.3	29.5	24.9	21.2	21.6
27	28.4	29.4	32.6	29.3	31.3	32.6	19.6	18.6	19.1
28	32.7	30.3	31.6	34.1	32.2	32.5	20.4	23.9	31.9
29	31.3	27.9	25.8	30.3	27.8	30.3	37.0	33.4	35.0
30	19.4	22.2	30.4	32.6	32.9	34.5	33.0	31.0	34.2
31				33.3	30.6	31.5			
1-10	29.2	27.8	28.7	31.3	29.6	31.0	25.4	23.7	25.0
11-20	28.6	26.9	28.5	31.0	29.5	30.9	26.0	24.4	26.7
21-31	27.0	25.5	28.1	30.4	29.1	30.8	26.7	25.2	27.3
Promedio.	28.24	26.70	28.45	30.89	29.36	30.91	26.06	24.41	26.31

PRESION ATMOSFÉRICA (700 *mm.* + ...)

CORDOBA, 1887

Tab. I, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	35.4	33.7	35.3	20.0	17.2	19.3	34.4	33.3	**35.1**
2	36.5	35.1	35.5	19.4	20.0	23.5	34.1	30.8	31.1
3	33.3	32.3	35.6	24.7	23.2	23.9	28.9	24.9	27.7
4	36.8	35.1	36.2	20.6	16.9	20.1	29.7	28.1	29.8
5	35.8	33.6	36.2	24.3	24.7	27.7	32.1	29.1	30.7
6	36.1	32.9	33.2	24.5	20.1	23.0	28.9	23.9	23.4
7	30.8	27.5	28.4	28.4	29.4	32.7	19.8	21.3	25.5
8	26.4	25.7	28.1	30.9	25.6	24.7	26.6	22.9	23.8
9	29.8	28.1	30.8	18.3	*15.3*	19.4	23.2	22.1	28.7
10	33.0	36.2	40.0	19.3	20.1	22.5	30.7	30.3	32.1
11	40.7	39.7	**41 2**	21.4	18.7	21.3	31.8	27.5	28.7
12	39.9	36.3	36.5	22.4	19.3	21.0	26.7	22.0	23.1
13	32.2	27.7	27.5	17.8	18.2	25.2	21.9	25.2	30.1
14	30.1	29.1	29.4	29.8	27.5	30.8	31.0	29.3	31.2
15	25.5	22.0	26.0	34.8	30.4	28.8	30.5	28.8	31.2
16	32.3	32.0	32.3	28.6	25.3	26.5	30.8	25.7	26.7
17	28.4	25.8	29.7	25.4	20.2	20.2	26.4	26.4	28.3
18	31.3	30.5	31.2	22.4	22.7	27.1	27.0	23.6	25.1
19	31.1	29.6	31.1	24.9	20.2	20.1	28.6	29.7	31.7
20	31.2	28.1	29.3	17.7	*15.3*	18.3	33.4	31.7	34.2
21	30.4	28.9	33.1	20.6	21.0	24.9	33.4	29.1	29.2
22	35.0	35.1	37.6	31.0	31.2	35.0	25.4	20.7	21.2
23	38.3	37.4	38.4	**36.8**	31.7	31.2	29.6	29.0	33.7
24	37.3	36.0	36.0	26.8	20 0	20.7	34.8	31.7	30.4
25	34.1	31.1	31.0	20.8	19.7	22.9	26.1	23.1	31.3
26	30.4	28.5	30.0	22.1	18.2	22.3	33.0	29.2	29.6
27	30.9	29.4	30.7	27.7	27.3	29.5	28.5	24.9	26.9
28	28.9	27.2	28.5	28.4	24.2	27.2	27.3	23.9	25.6
29	26.9	24.9	27.6	32.3	32.1	34.1	27.8	24.3	25.1
30	28.4	25.6	25.8	33.7	29.2	31.2	23.1	*19.3*	20.5
31	22.6	*19.5*	20.0	32.0	31.1	33.5			
1–10	33.4	32.0	33.9	23.0	21.3	23.7	28.84	26.67	28.79
11–20	32.3	30.1	31.4	24.5	21.8	23.9	28.81	26.99	29.03
21–31	31.2	29.4	30.8	28.4	26.0	28.4	28.90	25.52	27.35
Promedio	32.25	30.47	32.01	25.41	23.10	25.44	28.85	26.39	28.39

PRESION ATMOSFÉRICA (700 *mm.* + ...)

CORDOBA, 1887

Tab. I. 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	19.4	15.7	17.8	**34.6**	30.1	30.9	29.9	26.7	26.8
2	17.3	*13.4*	15.3	29.6	27.0	29.3	25.8	23.9	24.1
3	19.0	17.6	20.2	29.5	27.2	28.8	26.5	24.3	24.8
4	23.4	26.4	32.5	28.5	27.5	29.0	24.9	23.4	23.9
5	32.5	31.6	33.7	28.8	26.7	27.2	20.7	21.0	22.0
6	35.0	33.6	34.2	26.2	21.9	21.8	27.5	27.5	27.0
7	32.9	29.7	31.2	28.9	25.8	25.9	25.1	20.3	20.1
8	29.6	25.9	27.2	25.0	22.3	22.9	21.3	21.9	23.2
9	24.9	20.5	23.3	22.8	19.1	22.2	29.9	28.7	29.7
10	26.2	25.5	27.8	29.8	29.4	30.3	30.4	29.3	29.4
11	29.8	30.0	34.6	29.3	23.6	22.4	26.7	22.4	22.7
12	**40.4**	38.7	38.8	20.9	19.8	20.9	23.7	22.3	21.3
13	36.7	31.6	30.6	24.8	24.5	28.4	18.5	*15.7*	23.2
14	27.2	24.6	27.6	31.3	28.3	28.7	30.3	26.9	27.1
15	27.3	25.4	27.8	27.9	25.1	27.8	24.3	18.6	17.2
16	27.5	24.6	26.9	26.8	25.2	27.3	21.0	20.7	23.1
17	28.8	29.8	31.9	28.3	26.0	25.7	27.3	26.7	29.5
18	32.7	30.5	30.8	26.5	22.2	26.4	31.6	29.2	29.3
19	29.9	26.5	26.2	24.0	24.2	26.2	28.1	24.1	22.8
20	24.0	21.0	21.5	26.2	23.3	23.3	22.5	18.9	18.9
21	26.4	24.1	27.6	26.6	26.5	26.9	20.3	21.3	22.3
22	28.3	25.5	25.6	27.8	26.1	25.5	25.5	24.9	24.0
23	26.8	28.0	32.2	24.1	19.8	*18.1*	22.8	19.8	20.5
24	35.1	34.4	34.8	24.2	24.8	27.8	25.3	24.8	25.4
25	33.0	29.5	30.0	32.0	30.4	30.4	24.6	22.2	21.9
26	29.3	27.0	28.7	29.2	27.0	27.2	23.8	24.5	28.1
27	28.8	23.1	25.4	27.0	26.0	27.5	29.8	30.2	31.2
28	26.1	21.5	22.5	27.2	23.8	21.8	**32 5**	29.9	29.6
29	24.1	22.1	29.3	21.3	18.5	19.4	28.7	25.3	25.7
30	32.4	20.2.	33.5	27.9	28.3	29.6	26.1	23.1	24.2
31	36.7	34.4	36.4				25.6	24.8	26.3
1-10	26.02	23.99	26.32	28.37	25.69	26.83	26.20	24.70	25.10
11-20	30.43	28.27	29.67	26.60	24.22	25.71	25.40	22.55	23.51
21-31	29.73	27.25	29.64	26.73	25.12	25.42	25.91	24.62	25.38
Promedio	28.74	26.53	28.55	27.23	25.01	26.99	25.84	23.98	24.69

TEMPERATURA DEL AIRE EN CÓRDOBA

Enero, 1887

Tab. II, 1.

FECHA	7 a.	2 p.	9 p.	M	m
1	16.0	25.0	15.2	25.5	11.3
2	15.2	28.6	17.4	28.9	5.2
3	16.0	30.0	21.0	30.5	8.8
4	20.4	32.9	22.6	33.1	13.6
5	23.0	33.0	22.8	34.6	14.0
6	20.6	30.6	19.0	35.4	14.6
7	19.4	29.5	21.2	29.7	17.3
8	22.2	29.9	24.5	30.7	16.1
9	21.0	21.7	20.2	24.0	20.5
10	20.6	29.9	24.6	31.3	18.6
11	22.9	31.8	25.7	33.1	18.8
12	24.5	30.9	18.7	33.6	21.2
13	19.4	28.8	23.7	30.2	17.3
14	24.0	19.6	19 0	27.4	19.1
15	18.4	30.6	19.7	30.7	14.4
16	17.9	33.8	25.4	33.8	14.1
17	18.6	29.1	20.8	29.3	16.8
18	18.8	33.6	23.8	34.1	13.3
19	15.0	22.9	19.6	23.6	14.6
20	15.0	27.4	19.2	27.8	11.1
21	15.9	33.6	21.5	33.8	11.2
22	19.4	33.4	24.2	34.3	15.1
23	20.8	20.4	19.2	35.7	16.2
24	19.0	26.1	20.6	29.5	15.4
25	18.4	27.2	20.1	28.5	16.0
26	19.6	24.3	21.5	25.2	17.5
27	19.0	31.4	24.2	31.9	16.0
28	22.5	32.1	24.4	33.0	20.5
29	22.2	30.4	27.2	32.5	18.3
30	21.1	23.6	23.6	26.9	20.8
31	23.2	19.3	20.3	30.2	22.5
1–10	19.44	29.11	20.85	30.37	14.00
11–20	19.45	28.85	21.56	30.36	16.07
21–31	20.10	27.44	22.44	31.05	17.23
Promedio....	19.68	28.42	21.63	30.61	15.81

TEMPERATURA DEL AIRE EN CÓRDOBA

Febrero, 1887

Tab. II, 2.

FECHA	7 a.	2 p.	9 p.	M	m
1	15.8	24.2	14.2	24.7	15.1
2	13.4	29.2	17.3	29.5	7.7
3	15.7	28.0	17.3	28.4	10.8
4	12.9	28.5	18.8	29.1	9.3
5	14.3	31.3	19.8	31.3	10.0
6	18.2	35.3	24.8	35.6	13.6
7	20.2	32.5	26.5	34.4	17.0
8	19.2	30.5	22.4	30.7	17.8
9	19.0	33.9	23.0	34.3	16.3
10	19.6	37.9	25.1	38.3	16.3
11	20.4	26.2	22.4	27.8	20.2
12	21.8	32.4	25.4	33.3	17.8
13	25.4	37.2	17.8	37.8	19.6
14	19.2	25.4	21.0	28.5	17.0
15	18.4	33.6	22.4	34.2	15.4
16	19.4.	34.4	23.6	34.6	15.9
17	21.8	30.0	21.7	34.4	18.1
18	16.4	21.1	16.2	21.4	15.9
19	14.2	24.0	15.7	24.2	9.5
20	15.4	25.2	16.7	25.5	10.8
21	10.4	27.6	16.7	27.6	7.6
22	12.7	29.1	18.0	29.7	9.2
23	15.4	29.6	20.6	31.6	11.2
24	16.3	31.7	22.0	33.1	13.7
25	19.3	31.6	24.6	33.7	16.1
26	21.0	25.1	17.4	27.1	20.1
27	17.6	26.6	18.0	27.0	12.6
28	15.2	27.4	17.4	27.7	12.1
1–10	16.83	31.13	20.92	31.63	13.39
11–20	19.24	28.95	20.29	30.17	16.02
21–28	15.99	28.59	19.34	29.69	12.82
Promedio....	17.45	29.61	20.24	30.55	14.16

TEMPERATURA DEL AIRE EN CÓRDOBA

Marzo, 1887

Tab. II, 3.

FECHA	7 a.	2 p.	9 p.	M	m
1	14.2	28.2	18.3	28.6	11.7
2	13.2	30.0	18.0	30.0	10.6
3	14.6	24.0	17.5	26.1	11.7
4	13.4	26.5	21.2	27.4	11.0
5	16.6	23.9	19.0	24.4	15.5
6	15.8	26.3	18.3	28.7	14.0
7	15.8	30.0	20.4	30.3	12.9
8	17.0	31.3	20.8	31.5	13.3
9	15.8	30.8	18.4	31.1	12.5
10	16.5	31.9	18.0	32.2	13.7
11	14.4	20.8	18.1	21.1	13.8
12	14.6	25.2	20.8	26.0	13.1
13	16.4	29.0	18.2	30.5	13.1
14	14.1	29.2	17.9	32.0	11.1
15	15.4	29.0	20.0	31.6	13.5
16	14.6	24.4	19.3	25.2	13.4
17	15.7	31.0	21.2	32.5	13.8
18	17.2	20.4	15.2	21.7	17.0
19	18.4	28.7	23.8	29.7	14.6
20	17.5	30.0	20.0	30.4	16.5
21	14.9	32.2	18.2	32.2	13.4
22	13.0	31.4	19.8	31.8	10.7
23	17.2	31.2	20.9	33.5	15.0
24	13.3	26.6	14.6	26.6	11.3
25	11.7	28.3	21.5	28.9	8.7
26	12.0	24.3	11.1	24.3	11.0
27	9.7	29.2	18.0	29.7	6.5
28	10.0	35.4	19.6	35.8	8.2
29	11.2	34.2	21.8	34.8	8.8
30	20.6	32.4	23.6	33.2	14.9
31	18.6	33.0	21.6	33.6	16.7
1-10	15.29	28.29	18.99	29.03	12.69
11-20	15.83	26.77	19.45	28.07	13.99
21-31	13.84	30.75	19.15	31.31	11.38
Promedio....	14.95	28.67	19.20	29.53	12.65

TEMPERATURA DEL AIRE EN CÓRDOBA

Abril, 1887

Tab. II. 4.

FECHA	7 a.	2 p.	9 p.	M	m
1	17.8	31.0	18.5	31.8	15.8
2	15.2	21.0	15.7	21.3	15.0
3	16.4	15.2	14.1	16.4	13.7
4	13.8	20.7	15.2	22.4	12.5
5	11.6	24.4	15.0	24.6	9.9
6	11.8	20.9	15.6	21.7	10.1
7	12.4	23.6	15.4	23.8	10.5
8	12.9	26.3	14.4	26.3	9.0
9	12.4	28.2	19.6	29.2	9.5
10	12.3	13.6	8.8	15.5	12.1
11	8.8	19.0	14.4	19.2	8.0
12	7.6	21.8	15.3	22.2	7.5
13	9.8	23.2	16.8	23.9	7.5
14	11.2	26.2	18.2	27.0	9.0
15	10.4	26.7	18.4	27.8	9.0
16	12.2	20.0	10.8	21.7	10.4
17	6.7	22.1	11.9	22.1	4.9
18	9.4	26.0	14.2	26.5	7.5
19	11.2	27.0	15.2	28.8	10.2
20	13.0	24.0	16.3	26.4	12.2
21	13.2	29.2	17.0	29.3	12.2
22	11.8	19.7	13.8	22.7	11.3
23	8.4	25.5	19.8	25.7	7.1
24	6.6	19.1	13.4	20.1	5.7
25	8.4	21.4	8.8	22.3	5.8
26	13.7	26.6	14.2	26.9	6.2
27	9.3	16.7	4.8	16.9	8.1
28	—0.2	19.9	6.8	20.3	—1.4
29	0.2	24.1	10.3	25.0	—0.6
30	9.1	21.6	6.9	28.0	6.1
1-10	13.66	22.49	15.23	23.30	11.81
11-20	10.03	23.60	15.15	24.56	8.62
21-30	8.05	22.38	11.58	23.72	6.05
Promedio....	10.58	22.82	13.99	23.86	8.83

TEMPERATURA DEL AIRE EN CÓRDOBA

Mayo, 1887

Tab. II, s.

FECHA	7 a.	2 p.	9 p.	M	m
1	—0.4	22.5	10.2	23.0	—1.9
2	6.4	28.0	11.5	28.4	4.8
3	3.0	27.3	14.0	28.2	1.8
4	13.0	19.0	9.6	19.3	5.5
5	1.8	14.6	2.5	15.4	1.5
6	—2.2	17.7	4.3	18.1	—3.4
7	—1.6	19.6	5.5	20.9	—2.0
8	0.5	20.5	9.8	21.3	—0.3
9	1.6	19.0	5.8	19.5	0.2
10	3.3	19.8	9.4	20.2	3.0
11	1.6	22.3	6.5	23.1	1.3
12	1.0	26.2	9.0	27.7	0.4
13	5.2	23.2	8.8	24.1	3.0
14	3.0	20.6	9.4	20.6	2.1
15	9.6	17.6	8.6	17.6	6.4
16	3.6	22.1	9.3	22.3	2.0
17	1.9	20.7	7.4	21.8	1.0
18	0.2	20.6	11.4	20.7	*—0.8*
19	5.0	23.4	10.2	23.5	3.0
20	1.2	25.6	11.0	26.3	0.5
21	4.4	26.3	10.8	27.7	3.8
22	5.8	23.0	15.8	23.7	4.5
23	4.4	20.2	10.3	21.4	4.2
24	5.2	22.0	7.7	22.5	4.2
25	7.6	17.0	12.2	22.0	4.0
26	11.8	20.6	16.0	24.3	10.2
27	11.4	10.4	9.5	16.1	11.0
28	10.3	19.8	9.2	19.9	9.3
29	3.4	23.8	12.0	24.4	2.9
30	4.8	22.8	10.3	23.6	4.2
31	3.1	21.6	9.6	21.8	2.9
1-10	2.54	20.80	8.26	21.43	0.92
11-20	3.23	22.23	9.16	22.77	1.89
21-31	6.56	20.68	11.22	22.49	5.56
Promedio....	4.19	21.22	9.60	22.24	2.88

TEMPERATURA DEL AIRE EN CÓRDOBA

Junio, 1887

Tab. II, 6.

FECHA	7 a.	2 p.	9 p.	M	m
1	3.0	22.0	12.5	22.3	2.7
2	4.8	23.0	11.0	23.7	4.0
3	6.9	26.4	13.0	27.7	5.4
4	11.6	19.6	7.8	19.7	8.0
5	2.2	20.4	9.7	20.8	1.7
6	2.8	24.4	11.5	24.4	2.0
7	12.8	25.2	13.7	25.8	8.1
8	8.5	21.4	15.0	21.9	8.2
9	7.2	20.2	12.5	20.8	7.0
10	15.6	21.5	15.7	23.7	11.9
11	14.6	22.2	14.4	22.2	14.2
12	9.7	16.2	2.4	16.4	6.9
13	1.6	24.2	8.2	24.6	0.9
14	1.8	25.9	11.7	26.4	1.5
15	3.1	22.8	8.8	23.7	2.6
16	3.4	21.8	11.4	22.1	3.0
17	9.8	23.0	9.2	23.4	7.0
18	7.0	22.2	14.8	22.2	6.1
19	10.4	12.1	11.4	12.2	10.3
20	10.6	12.7	10.7	12.8	10.4
21	9.2	11.2	6.1	12.6	8.9
22	—2.9	16.1	4.0	16.1	*—3.4*
23	4.2	25.7	10.2	26.7	2.9
24	—0.9	26.6	8.1	26.8	—1.2
25	4.8	24.8	7.8	25.8	2.9
26	6.2	20.6	7.4	21.3	5.7
27	3.6	23.1	8.8	23.7	2.3
28	10.0	16.8	7.7	19.1	4.5
29	—0.6	9.4	5.2	10.0	—2.0
30	0.6	8.4	—2.0	8.6	—3.2
1–10	7.54	22.41	12.24	23.08	5.90
11–20	7.20	20.31	10.30	20.60	6.29
21–30	3.42	18.27	6.33	19.07	1.74
Promedio....	6.05	20.33	9.62	20.92	4.64

TEMPERATURA DEL AIRE EN CÓRDOBA

Julio, 1887

Tab. II, 7.

FECHA	7 a.	2 p.	9 p.	M	m
1	—4.7	14.8	—0.8	15.0	—5.1
2	—4.7	13.8	1.5	13.8	—5.5
3	—3.2	13.7	—0.0	14.0	—3.8
4	—5.6	13.1	0.8	13.8	—6.3
5	—2.4	14.7	7.0	15.5	—3.1
6	—2.0	19.1	9.4	19.4	—2.5
7	4.1	22.0	15.6	22.2	0.9
8	14.6	25.5	16.0	25.6	11.0
9	14.6	16.1	8.2	16.8	13.5
10	3.2	4.9	4.0	5.0	2.8
11	2.3	7.4	0.6	7.6	1.8
12	—2.6	9.6	0.2	10.0	—4.7
13	—3.3	13.3	7.2	13.7	—4.2
14	—0.5	15.6	5.4	15.8	—0.8
15	1.6	19.7	9.6	19.7	—0.0
16	3.6	15.7	11.6	16.5	1.7
17	9.6	19.3	11.4	20.7	9.3
18	3.3	20.7	6.8	21.0	2.7
19	1.7	16.7	9.0	16.8	—1.5
20	10.3	17.6	14.5	17.7	8.3
21	12.4	20.0	14.5	20.6	12.2
22	12.0	11.4	10.8	11.9	11.8
23	10.0	13.3	10.1	14.3	9.8
24	9.4	12.8	9.4	13.0	8.9
25	10.0	15.9	12.0	16.3	8.0
26	10.4	18.0	12.6	18.3	10.1
27	3.0	21.1	11.0	22.1	2.6
28	11.8	22.7	15.0	23.3	8.9
29	9.2	26.3	13.2	26.8	8.8
30	8.6	26.4	17.3	26.4	8.2
31	15.1	29.0	21.7	29.4	13.1
1–10	1.39	15.77	6.17	16.11	0.19
11–20	2.60	15.56	7.63	15.95	1.26
21–31	10.17	19.72	13.42	20.22	9.31
Promedio....	4.90	17.10	9.21	17.52	3.77

TEMPERATURA DEL AIRE EN CÓRDOBA

Agosto, 1887

Tab. II, 8.

FECHA	7 a.	2 p.	9 p.	M	m
1	16.4	29.6	18.7	30.6	15.8
2	12.2	27.6	16.5	29.1	11.8
3	12.4	24.2	17.0	25.3	11.8
4	14.4	32.6	24.5	32.9	12.6
5	17.3	22.6	15.5	23.3	14.8
6	12.6	23.6	15.2	23.9	12.3
7	8.6	17.8	7.0	17.9	8.0
8	6.2	15.0	12.0	15.3	*1.3*
9	10.8	23.0	15.0	25.8	9.8
10	7.8	21.4	11.0	22.6	6.9
11	6.6	24.4	13.9	24.8	5.2
12	8.3	27.0	20.6	27.8	7.3
13	12.4	31.0	16.3	33.5	11.9
14	9.1	21.9	9.6	22.2	6.6
15	4.4	17.0	13.9	17.3	3.7
16	11.6	25.0	13.2	25.6	11.3
17	15.2	24.2	18.0	25.7	10.7
18	13.0	27.7	17.2	28.1	12.7
19	8.6	24.2	16.4	25.3	8.0
20	12.5	34.6	21.8	35.3	12.0
21	15.0	23.4	18.7	23.5	13.5
22	11.1	19.3	8.0	19.8	10.9
23	3.0	17.2	10.7	18.0	2.0
24	6.2	25.6	16.3	25.8	4.5
25	7.4	26.5	16.1	26.9	6.1
26	9.8	20.9	11.9	21.1	6.5
27	7.8	15.4	10.6	16.4	7.0
28	3.7	18.6	10.1	18.8	2.6
29	7.4	12.4	4.8	13.2	6.9
30	4.6	15.3	9.0	15.5	1.9
31	8.2	12.2	10.6	12.7	7.8
1–10	11.87	23.74	15.24	24.67	10.51
11–20	10.17	25.70	16.09	26.56	8.94
21–31	7.65	18.80	11.53	19.25	6.34
Promedio....	9.83	22.62	14.19	23.35	8.52

TEMPERATURA DEL AIRE EN CÓRDOBA

Setiembre, 1887

Tab. II, 9.

FECHA	7 a.	2 p.	9 p.	M	m
1	6.4	10.1	8.2	10.2	6.3
2	2.2	14.4	10.0	15.2	0.6
3	7.4	18.8	8.6	19.2	2.3
4	3.6	23.6	14.6	24.2	1.3
5	9.0	22.0	12.4	22.4	8.0
6	11.6	18.8	15.6	19.0	8.4
7	12.8	15.6	10.7	18.8	12.0
8	5 3	20.7	12.4	21.0	3.6
9	8.0	21.0	12.6	21.3	6.3
10	8.9	20.4	9.4	23.0	7.3
11	4.9	22.9	12.2	22.9	1.6
12	8.4	26.8	16.0	26.8	6.3
13	9.1	18.4	12.3	19.7	6.7
14	7.0	21.2	7.4	21.2	4.7
15	7.2	18.5	8.3	18.9	5.6
16	3.4	17.2	14.2	18.0	*0.1*
17	5.6	20.8	16.1	21.1	4.0
18	11.8	17.4	10.5	17.7	11.7
19	7.7	20.1	11.7	20.4	4.2
20	8.2	20.5	11.1	20.5	6.4
21	9.0	24.3	13.8	24.3	5.8
22	12.2	27.2	17.8	27.8	9.9
23	10.0	18.6	11.3	18 9	9.9
24	6.0	22.4	10.9	22.8	2.5
25	6.4	30.4	16.7	31.0	1.4
26	6.8	24.0	14.6	24.6	5.2
27	9.4	29.3	16.3	29.4	5.5
28	11.7	32.4	25.0	32.8	8.5
29	13.3	33.8	21.9	34.1	9.2
30	20.4	35.0	25.2	**35.4**	19.0
1-10	7.52	18.54	11.45	19.43	5.61
11-20	7.33	20.38	11.98	20.72	5.13
21-30	10.52	27.74	17.35	28.11	7.69
Promedio....	8.46	22.22	13.59	22.75	6.14

TEMPERATURA DEL AIRE EN CÓRDOBA

Octubre, 1887

Tab. II, 10.

FECHA	7 a.	2 p.	9 p.	M	m
1	18.8	33.9	26.1	34.1	17.3
2	20.3	35.6	26.6	36.7	18.2
3	19.2	27.4	21.4	27.9	18.8
4	14.0	13.0	8.4	14.1	13.8
5	5.9	11.2	5.5	12.8	4.8
6	5.1	21.0	10.2	22.3	1.2
7	7.4	23.2	13.2	23.7	3.0
8	11.7	25.8	16.0	25.8	7.8
9	15.8	30.1	17.8	30.3	11.1
10	16.6	26.4	15.8	26.8	9.6
11	13.0	22.1	17.1	23.2	10.5
12	10.4	16.4	12.0	17.0	10.2
13	8.0	20.5	13.8	21.0	2.2
14	11.6	24.3	16.2	24.6	10.6
15	11.0	29.6	17.3	30.2	6.6
16	11.4	29.3	20.6	29.5	8.4
17	15.8	14.1	12.4	16.6	15.1
18	13.0	21.6	16.6	23.4	11.1
19	13.0	26.6	18.2	26.7	10.9
20	14.5	29.4	19.9	29.9	10.2
21	16.4	22.4	16.0	23.9	13.9
22	13.4	17.4	15.8	17.6	12.5
23	12.2	18.0	11.5	18.3	11.8
24	10.8	16.8	13.6	17.7	7.0
25	10.8	20.8	15.6	21.7	6.2
26	14.8	22.4	15.6	23.8	9.1
27	13.1	26.0	20.4	26.5	5.6
28	17.6	30.8	22.6	31.0	9.8
29	19.0	22.2	18.6	22.8	15.5
30	15.4	23.8	17.8	24.3	11.0
31	11.2	16.5	13.0	16.6	10.5
1–10	13.48	24.76	16.10	25.45	10.56
11–20	12.17	23.39	16.41	24.21	9.58
21–31	14.06	21.55	16.41	22.20	10.26
Promedio....	13.26	23.18	16.31	23.90	10.14

TEMPERATURA DEL AIRE EN CÓRDOBA

Noviembre, 1887

Tab. II, 11.

FECHA	7 a.	2 p.	9 p.	M	m
1	11.8	16.4	13.5	24.7	10.5
2	13.7	22.8	17.2	23.8	11.9
3	14.0	25.4	19.4	27.0	10.3
4	16.2	16.6	14.2	24.9	11.7
5	13.2	26.2	17.1	27.2	9.4
6	17.2	30.0	21.4	30.3	9.7
7	13.4	24.9	15.6	25.2	11.2
8	15.4	19.3	18.0	21.1	11.7
9	14.2	26.2	20.3	27.4	11.7
10	16.6	23.1	14.6	23.6	14.2
11	16.4	28.0	20.5	28.3	8.6
12	17.4	29.7	20.2	30.2	11.3
13	17.9	25.5	16.9	25.8	12.9
14	13.0	26.0	16.9	26.2	*6.9*
15	15.8	27.9	16.4	27.9	12.1
16	15.0	23.9	16.8	**31.6**	11.3
17	17.2	30.5	21.0	30.7	11.9
18	19.6	30.2	18.2	**31.6**	15.7
19	18.8	20.6	20.0	25.5	16.1
20	19.2	27.6	19.5	28.0	14.0
21	18.8	21.8	20.1	23.6	14.6
22	18.6	22.0	20.5	23.5	17.1
23	19.8	27.2	22.1	27.4	17.9
24	17.8	25.0	20.0	25.2	16.5
25	12.7	19.0	17.5	22.5	12.5
26	14.8	15.8	14.4	15.8	14.0
27	16.9	25.3	15.7	25.8	12.0
28	14.8	29.0	16.8	29.0	8.3
29	19.8	29.8	22.7	30.5	10.0
30	18.2	19.2	13.6	20.2	18.0
1–10	14.57	23.09	17.13	25.52	11.23
11–20	17.03	26.99	18.64	28.58	12.08
21–30	17.22	23.41	18.34	24.35	14.09
Promedio....	16.27	24.50	18.04	26.15	12.47

TEMPERATURA DEL AIRE EN CÓRDOBA

Diciembre, 1887

Tab. II, 12.

FECHA	7 a.	2 p.	9 p.	M	m
1	14.4	24.0	18.3	24.6	11.8
2	17.7	22.7	15.6	23.8	16.7
3	18.6	28.1	20.7	29.7	12.4
4	21.6	26.2	21.8	27.8	15.2
5	21.7	22.1	20.3	23.0	16.1
6	15.1	23.6	16.5	24.2	15.9
7	18.6	26.8	22.4	28.0	12.2
8	20.1	19.0	19.0	27.1	18.3
9	15.0	21.8	14.6	22.9	13 8
10	15.9	20.2	13.2	20.3	12.9
11	16.3	27.3	19.2	29.1	9.2
12	18.2	31.1	23.8	31.2	*7.6*
13	25.2	35.6	28.0	36 5	16.4
14	19 6	27.6	17.8	27.8	16.5
15	22.2	33.9	25.8	34.0	13.8
16	18.5	26.2	22.2	26.2	17.9
17	19.0	26.9	19.9	27.8	17.8
18	17.8	26.6	17.8	26.9	13.8
19	19.4	28.5	24.2	28.5	12.5
20	22.2	33.6	26.0	33.7	17.9
21	23.1	21.0	19.2	25.8	20.6
22	21.4	26.1	19.1	27.7	17.9
23	22.6	32.6	26.4	32.7	16.8
24	23.0	25.6	23.4	28.0	20.7
25	18.9	24.6	21.4	26.3	17.9
26	16 4	18.5	17.4	21.0	15 9
27	18.2	23.3	18.6	24.1	13.8
28	17.7	24.2	20.0	24.9	15.9
29	18.8	25.8	19.3	26.2	16.0
30	15.6	29.2	20.6	29.6	12.6
31	17.8	31.4	21.5	31.4	12.2
1–10	17.87	23.45	18.24	25.14	14.53
11–20	19.84	29.73	22.47	30.17	14.34
21–31	19.41	25.66	20.63	27.06	16.39
Promedio....	19.05	26.26	20.45	27.42	15.13

TENSION DEL VAPOR ATMOSFÉRICO

CÓRDOBA, 1887

Tab. III, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	5.5	5.2	6.4	6.0	8.2	7.7	10.7	13.0	11.3
2	5.5	6.7	7.2	8.5	5.5	9.6	10.2	12.3	11.2
3	8.9	6.2	6.6	8.7	7.7	9.4	10.7	12.3	11.2
4	7.3	8.8	10.7	9.1	9.6	9.7	9.9	11.6	12.5
5	10.5	10.1	13.4	10.1	10.1	12.0	13.2	14.0	13.7
6	12.5	12.6	14.0	12.5	11.3	14.4	12.2	13.5	14.2
7	12.5	12.6	14.4	14.5	16.4	15.3	12.2	13.5	13.3
8	13.7	15.2	15.3	16.1	17.6	**18.3**	13.0	13.2	12.4
9	14.9	15.3	16.3	15.1	14.2	15.5	12.2	10.3	10.3
10	16.7	19.3	18.4	15.2	10.0	11.2	12.4	12.3	13.2
11	16.5	16.0	17.6	11.6	14.6	14.9	11.0	10.9	12.7
12	18.1	16.8	15.5	12.7	14 7	16.1	11.5	12.2	13.2
13	15.5	16.9	20.8	15.4	13.3	15.0	12.4	13.6	11.8
14	16.6	14.4	15.1	14.5	16.8	16.9	10.9	12.4	14.7
15	11.3	10.1	12.5	14 3	11.8	17.6	12.5	17.2	15.1
16	12.1	10.7	11.1	14.5	10.4	10.5	11.1	15.0	15.5
17	12.8	9.5	13.8	13.7	15.8	15.3	12.8	**18.8**	10.7
18	12.7	9.0	15.6	13.0	11.6	10.6	11.2	12.2	12.0
19	12.3	12.5	14.7	9.1	8.7	10.6	13.6	16.6	16.8
20	10.5	11.0	9.6	8.8	9.4	9.2	14.4	16.6	14.6
21	10.5	9.7	14.2	8.2	10.9	10.3	12.3	10.2	10.0
22	13.3	12.5	9.7	9.6	10.2	11.4	9.8	9.7	11.2
23	14.3	16.5	14.9	11.0	12.3	12.8	12.8	13.6	8.5
24	14.1	16.1	15.4	11.6	11.9	13.1	9.7	6.3	8.1
25	15.0	16.1	14.5	13.6	12.9	14.9	8.0	10.6	7.5
26	15.7	16.3	15.3	17.5	10.4	12.0	5.2	4.7	6.1
27	15.1	16.3	16.9	9.7	9.0	11.0	5.6	8.2	6.3
28	15.5	15.3	17.3	10.9	10.7	11.2	7.3	6.9	9.9
29	17.2	18.8	14.0				8.7	9.7	9.7
30	17.6	**19.8**	**19.8**				9.4	10.8	9.8
31	19.7	15.9	12.1				11.1	10.4	12.2
1–10	10.8	11.2	12.3	11.6	11.1	12.3	11.7	12.6	12.3
11–20	13.8	12.7	14.6	12.8	12.7	13.7	12.1	14.6	13.7
21–31	15.3	15.7	14.9	11.5	11.0	12.1	9.1	9.2	9.0
Promedio	13.37	13.30	13.97	11.98	11.64	12.73	10.90	12.02	11.60

TENSION DEL VAPOR ATMOSFÉRICO

CÓRDOBA, 1887

Tab. III, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	12.4	14.5	**15.4**	3.3	*1.2*	4.4	5.1	7.9	7.6
2	12.3	14.5	12.6	5.6	5.8	5.6	6.0	9.0	8.1
3	13.0	12.6	11.7	5.1	6.9	7.5	6.9	8.5	8.1
4	11.2	12.2	11.7	4.7	4.2	3.8	5.6	5.3	5.1
5	9.4	9.9	11.3	3.5	3.7	4.1	4.8	5.5	5.4
6	8.6	11.6	9.8	3.5	4.0	4.2	5.1	9.1	8.0
7	8.7	9.5	10.7	3.7	3.9	4.5	8.9	8.8	8.5
8	9.4	9.7	11.9	4.3	4.9	4.8	7.3	9.5	6.1
9	9.7	13.7	12.8	4.6	5.5	5.2	5.2	6.8	9.1
10	9.8	10.3	8.0	4.9	6.5	5.7	11.6	**13.1**	12.3
11	7.8	8.6	9.8	4.8	7.4	5.6	11.1	11.4	6.7
12	7.3	9.1	11.1	4.7	3.0	4.6	3.7	*3.1*	3.5
13	7.9	9.3	9.7	5.5	8.6	6.6	4.0	5.7	5.0
14	8.8	11.1	10.7	5.4	6.8	5.7	4.7	5.2	5.6
15	8.8	11.8	10.6	6.4	6.0	6.7	5.1	6.8	6.4
16	8.3	8.7	7.7	5.7	7.0	6.1	5.2	7.7	7.5
17	6.6	6.6	6.2	5.1	7.3	5.9	7.1	7.8	6.2
18	7.3	10.5	10.2	4.3	6.8	6.8	6.4	8.6	9.3
19	9.3	11.1	10.9	6.1	5.6	6.6	8.9	9.1	9.2
20	9.8	9.0	10.8	4.6	5.5	6.2	8.8	9.0	8.7
21	9.7	11.4	11.5	5.8	8.4	6.7	5.9	5.0	4.6
22	9.8	10.0	10.3	6.2	7.7	6.3	3.3	3.7	4.5
23	7.8	13 2	6.0	5.4	4.5	6.6	4.4	6.2	4.7
24	5.9	6.4	6.6	5.0	5.2	5.1	3.9	5.6	5.3
25	6.9	5.9	6.0	6.0	9.0	8.3	5.7	6.4	5.0
26	9.4	9.2	3.6	6.8	8.5	**9.4**	6.0	7.9	6.4
27	*3.5*	3.7	4.1	6.9	7.7	8.1	5.5	7.8	6.2
28	4.0	5.4	4.4	8.5	8.7	7.5	5.5	7.1	5.3
29	4.2	5.9	6.7	5.5	8.2	8.0	3.9	4.4	3.6
30	6.6	5.7	4.3	6.2	9.2	8.0	3.6	*3.1*	3.3
31				5.6	7.0	6.8			
1-10	10.5	11.8	11.6	4.3	4.7	5.0	6.6	8.4	7.8
11-20	8.2	9.6	9.8	5.3	6.4	6.1	6.5	7.4	6.8
21-31	6.8	7.7	6.3	6.2	7.6	7.4	4.9	5.7	4.9
Promedio.	8.47	9.70	9.24	5.28	6.28	6.17	6.01	7.17	6.51

TENSION DEL VAPOR ATMOSFÉRICO

CORDOBA, 1887

Tab. III, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	3.1	*2.5*	2.7	8 9	10.0	10.0	6.1	6.1	4.6
2	2.6	3.9	3.3	9.1	10.6	10.7	4.7	5.4	5.2
3	3.3	3.0	3.3	9.7	**13.5**	11.5	5.2	6.8	5.9
4	2.8	3.2	3.5	11.1	10.3	13.1	4.9	9.2	7.4
5	3.2	4.0	4.9	5.6	8.7	7.4	6.7	9.4	7.0
6	3.7	6.9	7.2	5.9	7.7	9.0	8.0	8.7	10.2
7	5.7	7.3	10.4	7.2	6.9	6.0	10.5	8.3	7.8
8	10.6	10.1	9.5	6.9	6.6	6 5	6.0	5.0	7.7
9	9.1	6.5	5.7	8.3	10 5	9.7	7.8	7.1	8.8
10	5.0	4.6	4.5	7.2	7.7	7.6	7.7	6.1	5.7
11	3.6	3.4	3.8	6.4	9.0	9.1	5.2	4.6	4.8
12	3.3	3.6	4.0	7.4	13.3	11.9	5.6	6.4	6.4
13	3.4	4.4	4.6	10.0	5.0	7.5	6.6	6.2	5.7
14	3.9	4.8	5.4	6.7	*2.6*	4.5	5.2	5.1	4.9
15	5.0	6.2	6.8	5.2	5.4	6.8	5.4	5.1	5.0
16	5.6	8.0	8.2	6.6	8.3	8.0	*4.1*	6.4	8.2
17	7.7	7.2	8.0	11.2	13.2	13.2	5.8	8.0	9.9
18	5.5	7.0	5.7	10.9	12.0	11.1	8.8	9.0	8.0
19	5.1	7.9	7.8	8.0	13.3	11.8	7.3	8.2	8.4
20	8.5	10.0	9.9	10.5	2.7	10.6	7.0	7.1	7.9
21	9.2	10.5	10.4	11.4	11.7	11.5	7.0	8.0	7.2
22	9.7	9.3	9.3	6.1	6.2	4.8	7.1	7.1	5.6
23	8.7	8 6	8.0	4.7	5.4	4.7	5.9	4.2	5.0
24	8.3	8.2	8.1	5.0	6.8	6.8	4.9	4.5	5.1
25	8.7	8.1	8.3	5.9	7.1	6.8	4.5	5.6	7.5
26	8.9	9.2	9.1	8.1	10.3	7.3	5.5	7.1	6.4
27	5.5	7.0	8.4	6.1	5.9	6.1	6.9	7.2	7.2
28	8.0	8.3	8.5	5.3	5.6	5.0	6.7	6.9	6.9
29	7.3	8.6	8.5	2.9	2.9	3.6	7 9	8.4	8.9
30	7.8	**14.3**	13.0	4.0	5.0	5.0	**11.1**	9.4	9.6
31	11.4	10.2	9.6	4.6	6.0	5.7			
1–10	4.9	5.2	5.5	8.0	9.3	9.1	6.8	7.2	7.0
11–20	5.2	6.3	6.4	8.3	8.5	9.5	6.1	6.6	6.9
21–31	8.5	9.3	9.2	5.8	6.6	6.1	6.8	6.8	6.9
Promedio.	6.26	7.00	7.11	7.32	8.07	8.17	6.54	6.89	6.96

TENSION DEL VAPOR ATMOSFÉRICO

CORDOBA, 1887

Tab. III, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	13.6	13.4	13 3	8.1	8.0	8.9	8.4	12.0	12.4
2	13.9	13.9	**15.0**	9.2	9.5	8.6	14.5	17.4	12.8
3	13.1	9 3	12.8	9.2	9.1	9.0	13.7	17.4	16.3
4	8.2	8.0	7.5	10.0	13.5	11.5	16.9	18.2	17.8
5	6.5	7.0	6.3	10.2	9.7	11.4	18.1	17.1	17.4
6	5.9	5.6	7.2	10.5	9.9	9.8	9.7	10.5	12.4
7	6.2	4.8	7.2	10.4	8.0	8.9	12.4	16.3	15.9
8	6.5	6.4	7.5	12.2	12 4	12.8	15.0	15.1	13.4
9	7.4	6.7	8.5	10.8	14.6	14.9	6.6	7.2	9.4
10	8.1	8.1	8.7	8.7	7.8	8.2	9.9	8.4	8.8
11	9.0	8.5	8.7	7 5	7.0	5.7	9.7	12.4	12.8
12	6.6	5.9	5.6	9.3	7.4	8.7	13.1	16.1	16.4
13	4.8	5.2	5.0	8.5	6.7	7.2	13.9	15.0	8.2
14	4.7	6.5	6.3	7.7	7.6	7.0	7.2	7.9	8.8
15	7.0	8.0	8.0	7.6	9.6	8.0	11.9	15.7	15.9
16	7.2	8.1	8.2	8.6	15.0	12.6	8.9	13.2	10.4
17	10.8	11.6	10.5	11.4	10.3	8.9	8.1	*6.0*	8.7
18	10.4	10.4	11.4	11.3	14.6	15.2	10.7	6.5	7.3
19	10.6	10.7	9.8	12.7	**15.9**	15.4	13 9	17 1	15.5
20	9.9	8.7	9.4	14.1	12.2	11.8	16.4	15.3	12.7
21	9.7	9.9	11.2	12.0	15.6	14.4	15.8	17.1	15.3
22	10.9	10.4	11.4	14.8	15.2	16.0	16.2	13.3	13.9
23	9.3	9.2	8.6	13 6	15.2	16.3	16.5	13.5	14.7
24	6.7	7.5	8.5	13.6	13 5	13.7	12.5	12.0	12.4
25	7.7	7.2	7.5	10.0	11.8	12.3	15.4	17.7	**18.5**
26	7.5	7.4	8.8	11.1	11.6	11.7	12.7	12.3	12.0
27	8.8	8.6	9.1	11.8	10.6	9.8	12.5	11.8	11.1
28	9.7	10.8	12.6	9.5	10.4	9.5	10.9	11.6	11.2
29	12.3	10.3	8.0	8.5	11.0	11.1	11.5	10.9	11.4
30	5.5	7.3	6.7	7.3	9.0	10.4	11.9	11.1	11.5
31	8.4	8.4	7.1				11.9	10.2	10.7
1–10	8.9	8.3	9.4	9.9	10.3	10.4	12.5	14.0	13.7
11–20	8.1	8.4	8.3	9.9	10.6	10.1	11.4	12.5	11.7
21–31	8.8	8.8	9.1	11.2	12.4	12.5	13.4	12.9	13.0
Promedio	8.61	8.51	8.92	10.34	11.09	10.99	12.48	13.11	12.77

HUMEDAD RELATIVA

CÓRDOBA, 1887

Tab. IV, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	41	22	50	45	36	64	90	46	72
2	43	24	49	75	*18*	66	91	39	73
3	65	*20*	35	65	27	64	87	56	75
4	42	24	53	83	33	60	87	45	67
5	50	27	65	84	30	70	94	63	84
6	70	39	86	80	27	62	91	54	91
7	74	41	77	83	45	60	91	43	74
8	69	48	67	97	54	90	90	39	68
9	81	80	93	92	36	74	91	31	65
10	93	62	80	90	20	48	88	35	86
11	79	46	72	65	58	74	91	60	82
12	80	51	**97**	66	41	67	93	52	73
13	92	58	96	64	28	**99**	89	46	75
14	75	85	92	88	70	92	92	41	96
15	72	31	73	91	30	88	96	58	87
16	79	27	47	87	26	49	90	66	93
17	81	32	76	71	51	80	97	56	57
18	79	23	72	94	63	77	77	68	93
19	**97**	60	86	76	39	80	86	57	77
20	83	40	58	67	39	65	**97**	53	84
21	78	25	75	88	39	72	**97**	29	64
22	79	32	44	89	34	75	89	28	65
23	78	93	90	85	40	71	88	40	47
24	87	64	85	84	34	67	86	25	65
25	95	60	83	82	37	65	79	38	39
26	92	72	80	94	44	81	49	21	62
27	92	48	76	65	35	72	63	27	41
28	77	43	76	85	39	76	80	*16*	58
29	87	58	52				88	24	50
30	94	91	91				52	30	45
31	93	95	68				70	28	64
1–10	62.8	38.7	65.5	79.4	32.6	65.8	90.0	45.1	75.5
11–20	81.7	45.3	76.9	76.9	44.5	77 1	90.8	55.7	81.7
21–31	86.5	61.9	74.5	84.0	37.8	72.4	76.5	27.8	54.4
Promedio.	77.3	49.1	72.4	79.8	38.3	71.7	85.5	42.4	70.1

HUMEDAD RELATIVA

CÓRDOBA, 1887

Tab. IV, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	82	43	97	74	7	47	90	40	71
2	96	78	94	78	21	55	94	43	82
3	94	98	98	90	26	63	93	34	73
4	96	67	91	42	26	42	55	31	64
5	94	44	89	66	30	74	89	31	60
6	84	64	75	89	27	68	91	40	80
7	82	44	82	90	23	67	82	37	73
8	86	39	98	90	28	53	88	51	49
9	91	49	76	89	33	76	69	39	86
10	93	89	95	85	38	65	88	69	92
11	92	52	81	93	36	78	90	57	55
12	94	47	86	96	12	53	41	22	65
13	87	44	68	83	40	78	78	25	62
14	89	44	69	95	38	65	90	21	54
15	94	45	67	71	41	81	90	33	76
16	79	50	81	97	36	70	90	40	75
17	90	34	60	96	41	77	79	38	71
18	84	42	85	92	38	67	85	43	74
19	93	42	85	94	27	71	95	88	92
20	89	40	78	92	23	63	93	83	92
21	87	38	80	93	34	70	68	50	66
22	96	64	88	90	37	47	89	27	73
23	94	55	35	87	25	71	71	26	50
24	81	39	58	75	26	65	90	22	66
25	84	31	71	77	63	79	89	28	62
26	81	36	30	66	47	69	85	44	83
27	40	26	64	69	82	91	93	37	73
28	89	31	60	92	51	87	70	50	69
29	90	26	72	95	36	76	88	50	54
30	76	30	57	97	45	86	75	37	84
31				98	37	78			
1-10	89.8	61.5	89.5	79.3	25.9	61.0	83.9	41.5	73.0
11-20	89.1	44.0	76.0	90.9	33.2	70.3	83.1	45.0	71.6
21-31	81.8	37.6	61.5	85.4	43.9	74.5	81.8	37.1	68.0
Promedio.	86.9	47.7	75.7	85.2	34.6	68.8	82.9	41.2	70.9

HUMEDAD RELATIVA

CÓRDOBA, 1887

Tab. IV, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	90	20	62	65	32	62	86	66	57
2	81	33	64	87	38	76	87	45	57
3	91	26	72	91	60	80	68	43	70
4	93	28	71	92	28	57	83	42	59
5	83	32	66	38	43	57	78	48	65
6	94	43	82	55	35	70	79	54	77
7	93	37	79	87	46	79	96	62	82
8	86	43	70	97	52	63	91	28	72
9	74	48	70	88	50	76	98	38	82
10	87	70	73	92	40	77	91	34	65
11	66	44	78	88	40	77	79	23	45
12	87	40	85	91	43	66	67	25	47
13	96	38	61	94	15	55	76	40	53
14	88	37	80	77	14	50	70	27	64
15	96	36	76	84	38	58	72	32	61
16	95	60	80	64	36	71	70	44	68
17	87	43	79	87	59	86	85	44	73
18	95	39	77	98	43	76	86	61	85
19	98	56	92	96	60	85	93	47	83
20	92	67	81	98	6	55	87	40	80
21	87	60	85	90	55	71	81	35	61
22	94	93	97	62	38	60	67	27	36
23	95	76	87	83	37	49	64	26	50
24	95	75	92	71	28	50	70	23	53
25	95	60	80	77	28	51	62	17	53
26	95	60	85	89	55	71	74	32	52
27	96	38	86	78	45	64	79	24	53
28	78	41	67	88	35	54	66	19	30
29	84	34	75	37	27	56	70	22	46
30	93	57	89	64	39	58	63	23	40
31	89	34	50	57	56	60			
1–10	87.2	38.0	70.9	79 2	42.4	69.7	85.7	46 0	68.6
11–20	90.0	46.0	78.9	87.7	35.4	67.9	78.5	38.3	65.9
21–31	91.0	57.1	81.2	72.4	40.3	58.5	69.6	24.8	47.4
Promedio.	89.5	47.4	77.1	79.5	39.4	65.2	77.9	36.4	60.6

HUMEDAD RELATIVA

CÓRDOBA, 1887

Tab. IV, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	85	34	54	78	58	77	69	54	80
2	79	32	58	79	47	59	96	85	97
3	79	34	68	78	38	54	86	61	90
4	69	72	92	73	96	96	88	72	92
5	94	71	94	91	39	79	94	87	**98**
6	90	30	78	72	31	52	75	49	88
7	80	23	64	91	34	67	78	63	79
8	63	27	56	93	74	83	86	92	82
9	56	*22*	57	91	58	84	52	37	76
10	57	32	64	62	37	67	74	48	78
11	81	43	60	54	25	32	70	45	77
12	70	43	54	63	*24*	49	84	48	75
13	60	29	43	56	28	51	58	35	29
14	46	29	46	69	31	49	42	29	58
15	71	26	55	57	35	58	60	40	65
16	72	27	45	68	68	89	56	53	53
17	81	97	**98**	78	32	48	49	*23*	50
18	94	55	81	67	46	**98**	70	25	49
19	96	42	63	78	88	89	83	59	69
20	81	28	54	86	44	70	83	40	51
21	69	50	83	74	80	83	76	93	92
22	96	70	85	93	77	89	86	54	85
23	89	60	86	80	57	83	81	37	58
24	70	53	73	90	58	78	60	49	58
25	81	40	57	93	73	83	95	77	97
26	60	37	66	89	87	96	92	78	81
27	78	35	51	83	45	74	80	56	70
28	65	33	62	76	35	67	72	51	65
29	75	52	51	50	35	54	71	45	68
30	42	33	44	48	55	90	90	36	64
31	85	60	64				78	30	56
1-10	75.2	37.7	68.5	80 8	51.2	71.8	79.8	64.8	86.0
11-20	75.2	41.9	59.9	67.7	42.1	63.3	65.5	39.7	57.6
21-31	73.6	47.5	65.6	77.6	60.2	79 7	80.1	55.1	72.2
Promedio.	74.6	42.5	64.7	75.4	51.2	71.6	75.3	53.3	71.9

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1887

Enero

Tab. V, 1.

FECHA	LIBRE				À LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.6	5.4	3.2	9.2	0.4	1.9	1.5	3.8
2	0.2	5.9	3.2	9.3	0.2	1.9	1.4	3.5
3	0.2	5.2	5.3	10.7	0.2	2.0	2.4	4.6
4	1.0	6.5	4.8	12 3	0.7	2.3	2.3	5.3
5	0.5	5 9	2.5	8.9	0.5	1.9	1.1	3.5
6	0.3	4.0	0.7	5.0	0.3	1.8	0.6	2.7
7	0.9	5.5	3.6	10.0	0.7	1.8	1.2	3.7
8	0.2	5.4	3.4	9.0	0.2	1.2	1.4	2.8
9	0.2	0.5	1.6	2.3	0.2	0.4	0.4	1 0
10	0.2	3.5	2.3	6.0	0.2	0.5	1.0	1.7
11	0.1	5.0	3.3	8.4	0.2	1.4	1.5	3.1
12	0.3	5.5	0.6	6.4	0.3	1.8	0.5	2.6
13	0	3.5	2.4	5.9	0	0.9	0.8	1.7
14	0.2	1.3	0.6	2.1	0.2	0.8	0.4	1.4
15	0	6.0	2.6	8.6	0	1.3	0.8	2.1
16	0	5.6	3.4	9.0	0	1.6	1.4	3.0
17	0.4	4.9	2.7	8.0	0.4	2.0	0.8	3.2
18	0.1	6.7	4.5	11.3	0.1	2.4	2.2	4.7
19	0.8	0.8	1.6	3.2	0.8	0.4	0.8	2.0
20	0.1	5.1	3.6	8.8	0.1	1.1	1.4	2.6
21	0.5	4.5	3.4	8.4	0.5	1.2	1.0	2.7
22	0.2	5.2	4.5	9 9	0.2	1.4	2.0	3.6
23	0.2	2.5	0.3	3.0	0.2	1.2	0.2	1.6
24	0.1	3.2	0	3 3	0.1	0.8	0	0.9
25	0	3.3	1.1	4.4	0	0.6	0.5	1.1
26	0	1.0	1.2	2.2	0	0.4	0.3	0.7
27	0	4.3	2.4	6.7	0	0.8	0.5	1.3
28	0.4	4.2	2.5	7.1	0.4	1.1	0.9	2.4
29	0.2	1.6	1.5	3.3	0.2	0.4	1.6	2.2
30	0.5	0.4	1.0	1.9	0.5	0.3	0.5	1.3
31	0.2	0.5	0.8	1.5	0.2	0.5	0.7	1.4
1–10	4.3	47.8	30.6	82.7	3.6	15.7	13.3	32.6
11–20	2.0	44.4	25.3	71.7	2.1	13.7	10.6	26.4
21–31	2.3	30.7	18.7	51.7	2.3	8.7	8.2	19.2
Suma...	8.6	122.9	74.6	206.1	8.0	38.1	32.1	78.2

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1887

Febrero

Tab. V, 2.

FECHA	LIBRE 7 a.	LIBRE 2 p.	LIBRE 9 p.	LIBRE SUMA	Á LA SOMBRA 7 a.	Á LA SOMBRA 2 p.	Á LA SOMBRA 9 p.	Á LA SOMBRA SUMA
1	2.0	4.1	2.8	8.9	1.5	1.6	1.2	4.3
2	0	5.2	3.4	8.6	0	1.7	1.4	3.1
3	0.1	4 5	2.7	7.3	0.1	1.3	1.2	2.6
4	0.2	4.8	3.5	8.5	0.2	1.2	1.2	2.6
5	0.1	5.0	3.6	8.7	0.1	1.3	1.3	2.7
6	0.1	5.3	4.1	9.5	0.1	1.5	1.6	3.2
7	0.1	4.5	3.0	7.6	0.2	1.4	1.3	2.9
8	0.2	1.2	2.5	3.9	0.2	0.7	1.0	1.9
9	0.1	4.5	3.8	8.4	0.1	1.0	1.2	2.3
10	0	5.7	5.8	11.5	0	1.6	2.1	3.7
11	2.1	2.4	2.8	7.3	1.4	0.6	0.6	2.6
12	0.2	6.0	4 8	11.0	0.2	1.6	1.6	3.4
13	0.4	6.9	2 9	10.2	0.3	1.7	0.9	2.9
14	0	1.2	2.6	*3.8*	0	0.5	0.7	*1.2*
15	0	5.4	2.6	8.0	0	1.1	0.5	1.6
16	0.2	6.5	5.2	**11.9**	0.2	1.7	1.8	3.7
17	0.4	3.7	0.8	4.9	0.3	1.2	0.5	2.0
18	0.4	1.1	2.3	*3.8*	0.4	0.4	0.8	1.6
19	0.1	3.7	2.8	6.6	0.1	0.9	1.0	2.0
20	0	4.0	2.8	6.8	0	0.9	1.0	1.9
21	0.1	4.6	2.2	6.9	0.1	1.2	0.7	2.0
22	0	4.5	3.3	7.8	0	1.2	1.1	2.3
23	0.2	5.2	2.4	7.8	0.2	1.4	0.8	2 4
24	0.2	5.8	4.6	10 6	0.2	1.6	1.6	3.4
25	0.2	6.4	3 8	10.4	0.2	2.0	1.4	3.6
26	0.2	1.6	3 0	4 8	0.2	0.8	1.4	2.4
27	0.4	5.4	3.2	9.0	0.4	1.7	1.2	3.3
28	0	3.5	2.8	6.3	0	0.6	0.8	1.4
1–10	2.9	44.8	35.2	82.9	2.5	13.3	13.5	29.3
11–20	3.8	40.9	29.6	74.3	2.9	10.6	9.4	22.9
21–28	1.3	37.0	25.3	63.6	1.3	10.5	9.0	20.8
Suma...	8.0	122.7	90.1	220.8	6.7	34.4	31.9	73.0

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Marzo

Tab. V, 3.

FECHA	LIBRE				À LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0	4.4	3.1	7.5	0	1.0	1.0	2.0
2	0	4.7	3.8	8.5	0	1.2	1.0	2.2
3	0	3.1	2.7	5.8	0	1.0	0.7	1.7
4	0	3.3	1.9	5.2	0.1	0.9	0.6	1.6
5	0.2	2.0	1.4	3.6	0.2	0.8	0.5	1.5
6	0.1	3.3	1.1	4.5	0.1	0.8	0.3	1.2
7	0.1	4.0	2.8	6.9	0.1	0.8	0.8	1.7
8	0	5.4	3.2	8.6	0.1	1.5	1.4	3.0
9	0	5.1	3.6	8.7	0	1.4	1.1	2.5
10	0	4.8	2.8	7.6	0	1.3	1.3	2.6
11	0.3	0.3	0.6	1.2	0.3	0.3	0.6	1.2
12	0.1	2.1	2.2	4.4	0.2	0.4	0.4	*1.0*
13	0	3.6	2 6	6.2	0	1.0	0.7	1.7
14	0.1	4.3	0.4	4.8	0.1	1.0	0.2	1.3
15	0	2.6	1.2	3.8	0.1	0.8	1.0	1.9
16	0	1.9	0.6	*2.5*	0	0.6	0.5	1.1
17	0.8	3.2	1.8	5.8	0 8	0.7	1.0	2.5
18	1.9	1.4	0.7	4.0	1.8	0.4	0.3	2.5
19	0.1	3.3	2.4	5.8	0.1	0.8	0 8	1.7
20	0	3.6	2.2	5.8	0	0.8	0.9	1.7
21	0	4.2	3.6	7.8	0	1.6	1.3	2.9
22	0.1	4.6	3.4	8.1	0.1	1.5	1.6	3.2
23	0.2	5.2	2.7	8.1	0.2	1.2	1.9	3.3
24	0.6	3.6	2.2	6.4	0.6	1.1	1.1	2.8
25	0	3.7	1.8	5.5	0	1.1	1.1	2.2
26	1.4	3.4	2.2	7.0	1.3	1.1	1.0	3.4
27	0.1	4.4	3 3	7 8	0.1	1.6	1.4	3.1
28	0 2	4.4	3.9	8.5	0.2	2.4	2.1	4.7
29	0.1	4.4	3.5	8.0	0.1	2.6	2.0	4.7
30	0.9	5.3	3.1	**9.3**	0.8	2.3	1 8	**4.9**
31	0.5	4.3	3.2	8.0	0 5	2.0	1.8	4.3
1-10	0.4	40.1	26.4	66.9	0.6	10.7	8.7	20.0
11-20	3.3	26.3	14.7	44.3	3 4	6.8	6.4	16.6
21-31	4.1	47.5	32.9	84.5	3.9	18.5	17.1	39.5
Suma...	7.8	113.9	74.0	195.7	7.9	36.0	32.2	76.1

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Abril

Tab. V, 4.

FECHA	LIBBE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.3	2.8	0.7	3.8	0.3	0.9	0.4	1.6
2	0.2	0.2	0.6	1.0	0.2	0.1	0.6	0.9
3	0	0.1	0	*0.1*	0	0.1	0	*0.1*
4	0	1.8	0.5	2.3	0	0.6	0.2	0.8
5	0.3	2.7	1.6	4.6	0.3	1.0	0.8	2.1
6	0	1.9	0.5	2.4	0	0.5	0.4	0.9
7	0.8	3 3	1.9	6.0	0.6	1.3	0.8	2.7
8	0	3.9	1.8	5.7	0	1.4	1.3	2.7
9	0	2.6	1.0	3.6	0.2	0.9	0.8	1.9
10	0	0	0.5	0.5	0	0	0.4	0.4
11	0	1.6	0.3	1.9	0.2	0.5	0.3	1.0
12	0.5	2.4	1.6	4.5	0.5	0.7	0.4	1.6
13	0.1	2.0	2.2	4.3	0.1	1.0	1.2	2.3
14	0	2.5	1.2	3.7	0	0.9	0.6	1.5
15	0	3.7	1.4	5.1	0	0.8	1.0	1.8
16	2.2	2.6	1.0	5.8	1.4	1.0	0.8	3.2
17	0	2.9	1.3	4.2	0	1.0	0.9	1.9
18	0.2	3.1	1.3	4.6	0.2	1.0	0.9	2.1
19	0.1	3.0	1.2	4.3	0.1	0.9	0.8	1.8
20	0·1	2.8	1.2	4.1	0.1	1.2	0.7	2.0
21	0.2	2.8	1.8	4.8	0.2	1.2	1.2	2.6
22	0.1	2.2	0.6	2.9	0.1	0.8	0.4	1.3
23	0	1.9	1.5	3.4	0	0.5	0.6	1.1
24	0.6	2.2	1.6	4.4	0.6	0.6	1.0	2.2
25	0.4	2.6	1.1	4.1	0.3	1.2	0.8	2.3
26	0.4	2.7	2.4	5.5	0.3	0.9	1.9	3.1
27	1.3	3.4	1.1	5.8	0.8	1.6	0.8	3.2
28	0	2.4	1.0	3.4	0	1.1	0.8	1.9
29	0.1	2.6	1.4	4.1	0.1	1.1	1.1	2.3
30	0.8	3.5	1.8	**6.1**	0.7	1.3	1.4	**3.4**
1–10	1.6	19.3	9.1	30.0	1.6	6.8	5.7	14.1
11–20	3.2	26.6	12.7	42.5	2.6	9.0	7.6	19.2
21–30	3.9	26.3	14.3	44.5	3.1	10.3	10.0	23.4
Suma...	8.7	72.2	36.1	117.0	7.3	26.1	23.3	56.7

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Mayo

Tab. V, 5.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.1	3.2	2.2	5.5	0.1	1.4	1.4	2.9
2	0.6	3.1	2.2	5.9	0.6	1.2	1.5	3.3
3	0.1	4.5	1.8	6.4	0.1	1.1	1.2	2.4
4	0.9	4.2	1.8	6.9	0.6	1.9	1.5	4.0
5	0.6	2.2	0.7	3.5	0.6	0.6	0.6	1.8
6	0.2	2.4	1.4	4.0	0.2	1.0	0.9	2.1
7	0.2	4.9	2.4	7.5	0.2	1.2	1.4	2.8
8	0.2	4.2	2.5	6.9	0.2	1.6	1.6	3.4
9	0.2	2.0	1.0	3.2	0.3	0.8	0.3	1.4
10	0	0.2	0.8	1.0	0	0.7	0.4	1.1
11	0	1.9	1.0	2.9	0	0.8	0.6	1.4
12	0.2	3.7	1.5	5.4	0.3	1.0	1.0	2.2
13	0.1	2.5	0.8	3.4	0.1	1.0	0.8	1.9
14	0	3.1	1.6	4.7	0	1.2	1.1	2.3
15	0.2	1.6	0.6	2.4	0.2	0.2	0.5	0.9
16	0.1	2.6	1.1	3.8	0.1	1.1	1.0	2.2
17	0.1	1.9	0.8	2.8	0.1	0.7	0.6	1.4
18	0.1	2.8	1.9	4.8	0.1	0.9	1.2	2.2
19	0.3	4.6	2.8	7.7	0.3	1.7	1.6	3.6
20	0.1	3.3	3.0	6.4	0.1	1.5	1.6	3.2
21	0.3	2.0	1.6	3.9	0.3	0.9	0.9	2.1
22	0.2	3.0	2.6	5.8	0.2	1.3	1.2	2.7
23	0.3	2.2	1.2	3.7	0.3	0.8	0.6	1.7
24	0.3	3.4	1.9	5.6	0.3	1.2	1.2	2.7
25	0.1	0.9	0.8	1.8	0.1	0.4	0.6	1.1
26	0.5	2.4	1.3	4.2	0.4	1.1	0.8	2.3
27	0.8	0.2	0	1.0	0.6	0.2	0	0.8
28	0.1	1.3	1.0	2.4	0.1	0.4	0.4	0.9
29	0.1	2.3	1.4	3.8	0.1	0.8	0.5	1.4
30	0	2.1	1.0	3.1	0	0.9	0.6	1.5
31	0	2.6	3.2	5.8	0	1.0	1.0	2.0
1–10	3.1	30.9	16.8	50.8	2.9	11.5	10.8	25.2
11–20	1.2	28.0	15.1	44.3	1.2	10.1	10.0	21.3
21–31	2.7	22.4	16.0	41.1	2.4	9.0	7.8	19.2
Suma...	7.0	81.3	47.9	136.2	6.5	30.6.	28.6	65.7

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Junio

Tab. V, 6.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.1	3.8	1.8	5.7	0.1	1.0	1.0	2.1
2	0.1	2.0	1.3	3.4	0.1	0.9	0.6	1.6
3	0.1	2.3	2.0	4.4	0.1	0.9	1.1	2.1
4	0.7	2.4	1.4	4.5	0.6	1.4	0.8	2.8
5	0.2	3.8	2.2	6.2	0.2	1.3	1.2	2.7
6	0.1	3.2	2.4	5.7	0.1	0.8	1.0	1.9
7	0.1	4.7	1.3	6.1	0.1	1.3	0.8	2.2
8	0.3	2.6	2.0	4.9	0.3	0.8	1.2	2.3
9	1.1	2.6	1.2	4.9	1.0	0.9	0.6	2.5
10	0.5	3.7	1.0	5.2	0.4	1.2	0.5	2.1
11	0.1	2.3	2.5	4.9	0.1	0.7	1.9	2.7
12	1.4	2.8	1.1	5.3	1.0	1.8	0.8	3.6
13	0.2	2.7	2.1	5.0	0.2	1.1	1.4	2.7
14	0	3.6	3.0	6.6	0	1.6	1.8	3.4
15	0.3	2.7	1.4	4.4	0.3	0.9	1.2	2.4
16	0	2.1	1.8	3.9	0	1.0	1.2	2.2
17	0.1	3.3	1.7	5.1	0.1	1.6	1.2	2.9
18	0.2	2.1	1.0	3.3	0.2	0.8	0.9	1.9
19	0.2	0.4	0.2	*0.8*	0.2	0.1	0.2	0.5
20	0.1	0.7	0.1	0.9	0.1	0.1	0.1	*0.3*
21	0.6	1.4	0.7	2.7	0.4	0.9	0.6	1.9
22	0.2	2.2	1.7	4.1	0.2	1.0	0.8	2.0
23	1.3	3.2	2.0	6.5	1.0	1.6	1.3	3.9
24	0.2	2.4	1.8	4.4	0.2	1.2	1.1	2.5
25	0.1	3.1	1.3	4.5	0.1	1.3	0.9	2.3
26	0.4	1.8	1.4	3.6	0.4	0.9	1.0	2.3
27	0.1	1.3	1.2	2.6	0.1	0.6	0.7	1.4
28	0.2	2.8	1.6	4.6	0.2	1.2	1.2	2.6
29	0.4	1.4	1.2	3.0	0.4	0.3	0.8	1.5
30	0.4	1.0	0.9	2.3	0.3	0.5	0.4	1.2
1–10	3.3	31.1	16.6	51.0	3.0	10.5	8.8	22.3
11–20	2.6	22.7	14.9	40.2	2.2	9.7	10.7	22.6
21–30	3.9	20.6	13.8	38.3	3.3	9.5	8.8	21.6
Suma...	9.8	74.4	45.3	129.5	8.5	29.7	28.3	66.5

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Julio

Tab. V, 7.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.2	0.6	0.5	1.3	0.2	0.2	0.5	0 9
2	0.3	1.2	1.1	2.6	0.3	0.5	0.7	1.5
3	0.2	2.5	1.4	4.1	0.2	1.1	0.8	2.1
4	0.2	1.7	1.4	3.3	0.2	0.8	1.0	2.0
5	0.1	2.0	1.2	3.3	0.1	0.9	0.8	1.8
6	0.2	2.8	2.0	5.0	0.2	0.9	0.9	2.0
7	0	3.9	2.6	6.5	0	1.6	1.2	2.8
8	0.6	4.7	2.6	7.9	0 3	1.9	1.2	3.4
9	0.6	1.4	1.1	3.1	0.5	0.6	0.9	2.0
10	0.8	0.7	0.6	2.1	0.7	0.6	0.6	1.9
11	0.9	2.4	1.2	4.5	0.9	1.0	0.8	2.7
12	0.1	1.5	1.0	2.6	0.1	0.4	0.4	0.9
13	0.2	2.2	3.4	5.8	0.2	1.1	1.3	2.6
14	0.6	2.1	1.1	3.8	0.4	1.4	0.6	2.4
15	0.1	4.1	2.6	6.8	0.1	1.5	1.1	2.7
16	0.1	1.8	0.5	2.4	0.1	0.6	0.4	1.1
17	0.2	2.1	1.4	3.7	0.2	0.8	1.0	2.0
18	0.1	2.5	1.2	3.8	0.1	1.0	0.8	1.9
19	0.1	1.8	1.6	3.5	0.1	0.4	0.7	1.2
20	0.1	2.4	1.6	4.1	0.1	0.6	0.6	1.3
21	1.1	1.4	0.8	3.3	0.7	0.3	0.6	1.6
22	0.3	0	0	*0.3*	0.3	0	0	*0.3*
23	0.1	0.3	0.8	1.2	0.1	0.2	0.4	0.7
24	0.1	0.6	0.5	1.2	0.1	0.2	0.2	0.5
25	0	1.0	1.2	2.2	0	0.4	0.5	0.9
26	0.1	0.6	1.2	1.9	0.2	0.2	0.5	0.9
27	0	2.0	1.2	3.2	0	0.7	0.6	1.3
28	0.7	4.3	2.6	7.6	0.6	1.4	1.2	3.2
29	1.0	3.5	1.9	6.4	0.7	1.3	1.0	3.0
30	0.2	1.6	4.3	6.1	0.2	0.7	1.0	1.9
31	0.2	4.6	4.0	**8.8**	0.2	2.3	2.1	**4.6**
1-10	3.2	21.5	14.5	39.2	2.7	9.1	8.6	20.4
11-20	2.5	22.9	15.6	41.0	2.3	8.8	7.7	18.8
21-31	3.8	19.9	18.5	42.2	3.1	7.7	8.1	18.9
Suma...	9.5	64.3	48.6	122.4	8.1	25.6	24.4	58.1

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Agosto

Tab. V, 8.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	2.0	4.7	3.7	10.4	1.3	1.9	2.0	5.2
2	0.2	3.6	1.3	5.1	0.2	1.6	1.0	2.8
3	0.2	1.7	1.5	3.4	0.2	0.6	0.7	1.5
4	0	4.8	3.9	8.7	0	2.6	2.2	4.8
5	1.2	3.5	1.8	6.5	1.0	1.7	1.4	4.1
6	1.6	3.7	1.5	6.8	1.3	1.2	0.8	3.3
7	0.6	3.6	1.3	5.5	0.6	0.7	0.6	1.9
8	0	2.3	1.8	4.1	0	0.7	1.1	1.8
9	0.7	3.4	1.2	5.3	0.6	0.8	0.8	2.2
10	0.3	2.7	1.4	4.4	0.3	0.9	0.6	1.8
11	0.2	3.1	2.2	5.5	0.2	1.4	1.5	3.1
12	0.1	3.3	3.7	7.1	0.1	1.1	1.2	2.4
13	0.2	8.3	2.6	11.1	0.2	3.2	2.6	6.0
14	0.3	3.7	1.8	5.8	0.3	1.5	1.6	3.4
15	0.2	2.3	1.6	4.1	0.2	0.5	1.2	1.9
16	1.4	4.1	1.4	6.9	1.0	0.6	1.2	2.8
17	0.2	5.3	3.2	8.7	0.2	1.3	1.3	2.8
18	0	5.4	2.2	7.6	0	1.4	1.6	3.0
19	0	2.6	1.4	4.0	0.2	0.7	1.0	1.9
20	0	12.0	4.3	16.3	0	3.5	2.8	6.3
21	0.7	1.7	2.4	4.8	0.6	0.7	1.0	2.3
22	2.5	3.8	2.0	8.3	2.1	1.5	1.4	5.0
23	0.2	3.4	2.8	6.4	0.2	1.1	1.5	2.8
24	0.5	5.7	4.2	10.4	0.5	2.6	2.1	5.2
25	0.5	4.4	2.6	7.5	0.5	1.8	2.0	4.3
26	0.3	1.8	2.6	4.7	0.3	0.7	0.9	1.9
27	1.1	2.6	1.0	4.7	0.9	1 1	1.0	3.0
28	0.2	4.2	3.4	7.8	0.2	1.3	1.1	2.6
29	1.9	2.8	1.3	6.0	1.7	1.6	1.0	4.3
30	0.1	2.5	2.1	4.7	0.1	1.2	1.2	2.5
31	0.8	1.5	0.9	3.2	0.7	0.5	0.7	1.9
1-10	6.8	34.0	19.4	60.2	5.5	12.7	11.2	29.4
11-20	2.6	50.1	24.4	77.1	2.4	15.2	16.0	33.6
21-31	8.8	34.4	25.3	68.5	7.8	14.1	13.9	35.8
Suma...	18.2	118.5	69.1	205.8	15.7	42.0	41.1	98.8

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Setiembre

Tab. V, 9.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.5	0.2	0.6	*1.3*	0.5	0.2	0.6	*1.3*
2	0.3	3.4	2.2	5.9	0.3	1.0	0.8	2.1
3	0.9	2.6	2.2	5.7	0.8	1.2	1.2	3.2
4	0.2	3.9	1.6	5.7	0.2	1.3	1.4	2.9
5	0.4	4.5	2.6	7.5	0.4	1.7	1.6	3.7
6	0.4	2.4	1.2	4.0	0.4	0.4	0.8	1.6
7	0.2	2.1	1.2	3.5	0.2	0.6	0.6	1.4
8	0.3	3.4	2.4	6.1	0.3	1.3	1.3	2.9
9	0.2	2.0	2.0	4.2	0.2	0.6	1.4	2.2
10	0.2	3.3	0.8	4.3	0.2	0.8	0.7	1.7
11	0.2	6.5	5.5	12.2	0.3	2.6	2.5	5.4
12	1.6	7.0	5.0	13.6	1.3	2.8	2.7	6.8
13	0.7	4.0	2.7	7.4	0.5	2.1	2.0	4.6
14	0.8	3.7	2.2	6.7	0.8	1.3	1.7	3.8
15	0.6	3.7	2.8	7.1	0.4	1.4	1.6	3.4
16	0.2	2.3	1.6	4.1	0.2	1.1	1.1	2.4
17	0.3	3.3	1.5	5.1	0.3	1.0	1.2	2.5
18	0.5	1.5	0.9	2.9	0.5	0.6	0.6	1.7
19	0.2	4.9	2.0	7.1	0.2	0.8	1.1	2.1
20	0.1	2.9	3.2	6.2	0.1	1.1	1.6	2.8
21	0.2	5.3	5.1	10.6	0.2	2.1	2.5	4.8
22	1.7	6.8	5.7	14.2	1.2	2.8	2.8	6.8
23	2.1	3.9	3.3	9.3	1.7	2.0	2.5	6.2
24	0.2	4.7	2.6	7.5	0.2	1.8	1.6	3.6
25	0.3	5.9	4.6	10.8	0.3	2.4	3.4	6.1
26	0.5	4.0	4.3	8.8	0 5	1.5	2.0	4.0
27	0.2	6.2	5.8	12.2	0.2	3.0	3.0	6.2
28	0.6	6.9	5.6	13.1	0.5	3.0	3.1	6.6
29	0.7	6.1	5.9	12.7	0.7	3.0	3.1	6.8
30	2.8	8.2	7.1	**18.1**	2.3	3 7	4.2	**10.2**
1-10	3.6	27.8	16.8	48.2	3.5	9.1	10.4	23.0
11-20	5.2	39.8	27.4	72.4	4.6	14.8	16.1	35.5
21-30	9.3	58.0	50.0	117.3	7.8	25.3	28.2	61.3
Suma...	18.1	125.6	94.2	237.9	15.9	49.2	54.7	119.8

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Octubre

Tab. V, 10.

FECHA	LIBBE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	1.0	7.5	5.9	14.4	0.9	2.6	3.2	6.7
2	1.0	8.5	4.6	14.1	0.8	2.1	2.9	5.8
3	2.3	7.5	4.2	14.0	1.7	2.3	2.2	6.2
4	1.6	1.1	0.8	3.5	1.4	0.9	0.6	2.9
5	0.3	2.3	1.2	3.8	0.3	1.0	0.8	2.1
6	0.1	3.9	2.4	6.4	0.1	1.4	1.2	2.7
7	0.2	5.2	4.1	9.5	0.2	2.2	2.2	4.6
8	0.7	6.2	5.0	11.9	0.7	2.8	2.6	6.1
9	1.2	6.4	5.2	12.8	1.1	3.2	2.6	6.9
10	0.8	6.2	3.4	10.4	0.7	2.8	2.1	5.6
11	0.3	3.7	2.0	6 0	0.3	1.5	1.9	3.7
12	1.6	2.8	1.2	5.6	1.4	0.9	0.8	3.1
13	0.4	5.3	4.1	9.8	0.4	2.0	2.0	4.4
14	1.6	3.7	3.8	9.1	1.3	1.9	2·1	5.3
15	0.6	5.2	3.5	9.3	0.6	1.8	2.0	4.4
16	0.6	6.2	4.0	10.8	0.6	2.7	2.3	5.6
17	0.3	0.3	0.2	0.8	0.3	0.3	0.2	0.8
18	0.0	3.8	0.6	4.4	0.0	1.2	0.6	1.8
19	0.2	4.0	3.3	7.5	0.2	1.1	1.5	2.8
20	0.1	6.3	4.8	11.2	0.1	2.4	2.3	4.8
21	1.1	3.8	1.2	6.1	0.9	1.2	0.9	3.0
22	0.2	0.5	0.4	1.1	0.2	0.4	0.4	1.0
23	0.2	1.6	1.5	3.3	0.2	0.8	0.7	1.7
24	0.2	3.1	1.1	4.4	0.3	0.8	0.6	1.7
25	0.0	4.2	2.4	6.6	0.0	1.4	1.2	2.6
26	0.3	5.4	2.4	8.1	0.3	2.0	1.3	3.6
27	0.0	6.0	3.0	9.0	0.1	2.0	2.1	4.2
28	0.6	6.1	4.8	11.5	0.6	2.0	2.6	5.2
29	0.7	3.8	6.3	10.8	0.6	2.6	3.8	7.0
30	0.8	4.2	2.8	7.8	0.9	1.4	1.4	3.7
31	0.6	0.4	0.6	1.6	0.6	0.4	0.5	1.5
1–10	9.2	54.8	36.8	100.8	7.9	21.3	20.4	49.6
11–20	5.7	41.3	27.5	74.5	5.2	15.8	15.7	36.7
21–31	4.7	39.1	26.5	70.3	4.7	15.0	15.5	35.2
Suma...	19.6	135.2	90.8	245.6	17.8	52.1	51.6	121.5

EVAPORACION DEL AGUA (EN MILÍMETROS)

CÓRDOBA, 1887

Noviembre

Tab. V, 11.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.0	1.2	1.3	2.5	0.0	0.0	0.4	0.4
2	0.2	2.8	1.3	4.3	0.0	0.8	1.2	2.0
3	0.3	3.4	2.6	6.3	0.3	1.2	1.4	2.9
4	0.3	2.4	0.2	2.9	0.3	0.9	0.2	1.4
5	0.0	4.0	2.8	6.8	0.0	1.0	1.0	2.0
6	0.1	5.5	3.0	8.6	0.0	1.9	2.4	4.3
7	0.8	4.2	2.8	7.8	0.8	1.1	0.9	2.8
8	0.1	0.8	1.2	2.1	0.1	0.5	0.4	1.0
9	0.0	5.1	3.4	8.5	0.1	1.5	1.1	2.7
10	0.6	5.2	2.7	8.5	0.6	1.8	1.1	3.5
11	0.2	6.1	6.1	12.4	0.2	2.2	3.2	5.6
12	0.8	7.1	3.3	11.2	0.8	2.8	1.6	5.2
13	0.5	6.4	2.8	9.7	0.5	2.4	1.8	4.7
14	0.4	5.2	4.4	10.0	0.4	1.6	1.9	3.9
15	0.6	6.9	3.8	11.3	0.5	1.9	1.8	4.2
16	0.3	4.5	0.6	5.4	0.3	2.0	0.6	2.9
17	0.0	5.3	4.2	9.5	0.2	1.7	2.2	4.1
18	0.2	5.4	2.4	8.0	0.2	1.8	1.2	3.2
19	0.3	1.8	1.8	3.9	0.3	1.1	0.6	2.0
20	0.0	4.8	3.4	8.2	0.0	1.3	1.4	2.7
21	0.1	1.2	0.3	1.6	0.1	0.7	0.3	1.1
22	0.2	1.0	1.1	2.3	0.2	0.3	0.2	0.7
23	0.5	4.3	1.1	5.9	0.3	0.8	1.0	2.1
24	0.2	4.1	1.8	6.1	0.2	1.1	0.8	2.1
25	0.4	1.6	2.6	4.6	0.4	0.8	0.8	2.0
26	0.0	0.1	0.3	*0.4*	0.0	0.1	0.2	*0.3*
27	0.0	4.7	1.4	6.1	0.0	2.1	1.9	4.0
28	0.0	4.6	3.6	8.2	0.0	1.6	1.6	3·2
29	0.6	6.0	5.3	11.9	0.4	2.6	2.0	5.0
30	1.9	3.4	0.7	6.0	1.6	1.2	0.4	3.2
1–10	2.4	34.6	21.3	58.3	2.2	10.7	10.1	23.0
11–20	3.3	53.5	32.8	89.6	3.4	18.8	16.3	38.5
21–30	3.9	31.0	18.2	53.1	3.2	11.3	9.2	23.7
Suma...	9.6	119.1	72.3	201.0	8.8	40.8	35.6	85.2

EVAPORACION DEL AGUA (EN MILÍMETROS)

CORDOBA, 1887

Diciembre

Tab. V, 12.

FECHA	LIBRE				Á LA SOMBRA			
	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
1	0.1	1.6	0.9	2.6	0.1	0.6	0.4	1.1
2	0.0	0.4	0.8	1.2	0.0	0.2	0.6	0.8
3	0.0	2.7	2.7	5.4	0.0	1.0	0.6	1.6
4	0.0	3.3	0.9	4.2	0.0	0.8	0.4	1.2
5	0.1	1.8	0.2	2.1	0.1	0.4	0.4	0.7
6	0.2	4.4	4.2	8.8	0.2	1.7	0.6	2.5
7	0.2	5.8	3.3	9.3	0.2	1.3	1.2	2.7
8	0.4	4.2	0.6	5.2	0.2	0.9	0.3	1.4
9	1.1	5.0	3.6	9.7	0.9	1.6	1.3	3.8
10	0.2	2.7	3.4	6.3	0.0	1.2	0.9	2.1
11	0.1	6.0	5.6	11.7	0.1	1.8	1.9	3.8
12	0.0	7.1	2.7	9.8	0.0	1.2	1.2	2.4
13	1.2	9.1	5.9	**16.2**	1.1	3.4	3.0	7.5
14	3.0	4.4	3.6	11.0	2.9	1.5	1.9	6.3
15	0.6	8.6	4.2	13.4	0.6	2.6	2.4	5.6
16	1.4	7.1	4.2	12.7	1.4	2.5	2.5	6.4
17	3.3	6.3	6.4	16.0	2.3	3.4	2.2	**7.9**
18	0.5	6.0	3.8	10.3	0.4	1.7	2.2	4.3
19	0.4	6.6	4.0	11.0	0.2	1.8	1.8	3.8
20	0.8	8.4	5.3	14.5	0.8	2.2	3.2	6.2
21	1.6	0.0	4.2	5.8	1.1	0.2	0.4	1.7
22	0.2	5.4	3.0	8.6	0.2	1.1	2.4	3.7
23	0.4	5.9	5.3	11.6	0.4	2.6	2.5	5.5
24	1.5	3.2	1.8	6.5	1.3	1.4	1.5	4.2
25	0.4	0.1	0.1	*1.1*	0.4	0.1	0.6	1.1
26	0.0	1.9	2.4	4.3	0.1	0.5	0.5	1.1
27	0.1	2.3	1.8	4.2	0.1	1.1	1.0	2.2
28	0.3	2.4	2.3	5.0	0.3	0.6	1.2	2.1
29	0.3	4.3	2.7	7.3	0.2	1.4	1.2	2.8
30	0.0	4.1	3.6	7.7	0.4	1.2	1.4	3.0
31	0.3	6.3	6.0	12.6	0.2	2.6	2.2	5.0
1–10	2.3	31.9	20.6	54.8	1.7	9.7	6.5	17.9
11–20	11.3	69.6	45.7	126.6	9.8	22.1	22.3	54.2
21–31	5.1	35.9	33.7	74.7	4.7	12.8	14.9	32.4
Suma...	18.7	137.4	100.0	256.1	16.2	44.6	43.7	104.5

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CORDOBA, 1887

Tab. VI, 1.

FECHA	Enero					Febrero				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	*15.8*	43.4	17.2	48.9	13.6	14.8	35.6	16.0	37.0	14.3
2	17.7	36.5	19.4	52.6	*10.1*	15.0	40.1	17.9	43.6	*11.0*
3	19·9	41.8	21.8	48.6	13.1	16.2	48.6	19.0	51.7	14.4
4	23.3	**49.4**	24.4	**58.8**	16.8	16.9	39.4	20.4	50.9	13.1
5	25.7	39.4	25.0	58.3	17.6	18.8	51.1	21.3	54.8	14.3
6	26.7	31.6	19.6	46.9	18.0	20.4	**55.9**	25.3	**57.2**	16.7
7	19.0	33.4	21.0	39.8	14.0	22.3	43.5	26.5	53.8	19.6
8	20.7	39.5	24.1	46.5	17.9	20.4	33.3	22.6	40.3	19.3
9	22.5	23.6	20.8	28.2	21.0	20.2	43.6	23.1	46.8	18.6
10	20.7	34.3	23.5	41.8	19.6	21.0	52.5	25.3	57.1	18.5
11	23.6	40.1	25.5	53.7	20.1	22.4	31.6	23.5	41.5	22.0
12	27.2	33.6	20.8	53.2	22.2	23.0	50.2	25.9	53.7	19.3
13	19.8	32.5	23.9	41.1	19.1	24.8	45.4	20.5	56.3	21.6
14	24.2	21.5	19.9	26.1	20.7	20.3	25.0	21.8	25.7	20.0
15	17.8	40.3	20.3	47.6	16.5	19.3	43.2	22.5	52.1	17.9
16	19.8	42.3	24.0	54.4	17.0	20.1	45.1	22.2	45.3	19.2
17	19.6	40.0	21.7	52.8	17.8	21.1	27.4	21.5	42.0	19.3
18	21.2	46.5	25.6	58.0	16.5	17.9	29.7	17.1	31.3	17.2
19	17.5	25.6	20.5	30.5	16.8	15.1	38.4	16.7	39.2	12.5
20	17.4	30.9	19.0	37.9	15.3	15.3	37.7	17.5	38.4	12.7
21	17.4	38.5	22.0	45.6	14.0	*13.3*	44.4	17.4	45.5	11.4
22	20.0	45.8	23.2	50.2	17.7	15.3	45.6	19.0	45.9	12.8
23	21.8	22.0	20.4	40.1	18.8	17.3	32.7	20.9	48.0	14.6
24	20.5	25.3	20.7	37.0	17.2	18.0	41.2	22.0	50.0	16.5
25	19.7	31.5	21.8	37.6	18.4	20.5	40.0	24.6	50.8	18.4
26	20.8	24.6	20.8	25.9	19.1	21.8	30.7	18.4	33.1	21.1
27	22.2	39.6	23.4	46.5	17.7	16.2	35.1	18.5	41.2	14.4
28	23.3	39.8	24.0	42.1	20.9	16.4	45.0	18.7	49.8	14.0
29	24.6	31.2	20.1	34.4	19.9					
30	22.3	24.6	23.3	26.9	21.3					
31	23.7	21.7	19.1	29.2	22.5					
1–10	21.2	37.3	21.7	47.0	16.2	18.6	44.4	21.7	49.3	16.0
11–20	20.8	35.3	22.1	45.5	18.2	19.9	37.4	20.9	42.5	18.2
21–31	21.5	31.3	21.7	37.8	18.9	17.4	39.3	19.9	45.5	15.4
Prom..	21.17	34.54	21.83	43.26	17.78	18.72	40.43	20.93	45·82	16.60

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1887

Tab. VI, 2.

FECHA	Marzo					Abril				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	17.3	39.9	19.0	50.4	15.0	20.3	33.5	20.0	46.4	19.5
2	16.2	44.5	19.4	50.6	14.2	16.8	21.2	16.8	22.3	16.5
3	17.4	26.4	18.7	40.4	14.6	15.0	16.1	15.0	17.1	14.8
4	16.4	31.4	21.7	45.2	14.1	15.2	19.4	15.2	26.9	12.1
5	18.4	24.4	18.6	29.9	17.2	13.6	20.9	15.6	27.3	13.5
6	17.2	25.9	19.1	36.2	15.9	13.7	20.8	15.8	26.2	13.5
7	17.4	38.4	20.2	39.3	15.4	13.0	21.0	15.6	27.5	12.7
8	17.8	41.8	20.8	46.7	15.1	13.5	22.3	15.0	29.8	13.2
9	17.7	42.2	20.4	50.4	15.2	13.8	25.5	18.6	36.2	13.4
10	18.6	41.0	18.1	52.3	16.3	13.4	14.5	11.5	17.8	13.2
11	16.6	23.3	18.5	23.5	16.2	11.3	19.7	15.0	27.3	11.2
12	16.7	43.3	21.0	44.2	15.0	10.7	20.7	13.3	27.2	10.5
13	19.3	38.3	19.7	50.5	15.5	11.1	21.7	15.4	25.0	10.8
14	16.4	32.8	18.7	53.3	14.1	12.5	24.5	17.2	32.4	12.4
15	16.2	32.5	21.1	33.0	16.0	12.6	23.9	16.2	33.2	11.2
16	15.5	24.4	20.3	26.5	15.1	13.6	19.5	12.6	21.3	12.7
17	17.1	27.3	20.5	28.4	16.2	9.7	19.7	12.0	29.7	8.7
18	17.7	19.8	16.3	21.5	16.8	10.8	23.5	14.8	34.8	9.4
19	17.8	34.9	22.5	43.6	16.4	12.9	24.9	15.6	39.9	12.1
20	18.7	36.5	20.4	47.3	17.9	13.8	22.2	16.5	31.6	13.7
21	17.1	38.6	19.6	50.7	16.1	14.1	37.0	16.8	40.1	13.5
22	15.8	41.9	20.8	51.3	14.1	14.6	20.4	14.5	31.5	13.7
23	19.1	35.0	22.0	51.8	16.9	11.3	24.4	17.5	37.1	10.5
24	16.6	37.4	17.4	49.9	14.7	10.1	20.9	14.0	31.2	9.1
25	14.8	36.3	21.7	48.9	12.8	10.7	21.0	10.6	36.1	8.7
26	16.5	32.8	14.1	46.8	13.0	15.2	24.8	14.5	38.1	9.3
27	*12.7*	38.4	18.8	50.8	*10.6*	11.3	27.9	7.3	33.0	9.5
28	13.8	39.2	20.9	56.3	12.5	*4.3*	18.7	8.3	33.4	*2.9*
29	15.0	41.0	22.3	53.7	13.6	4.8	21.8	18.0	33.9	3.4
30	20.5	37.3	23.6	50.2	17.5	9.5	22.3	8.4	40.5	7.2
31	21.8	35.6	23.0	44.4	19.9					
1–10	17.4	35.9	19.6	44.1	15.3	14.8	21.5	15.9	27.8	14.2
11–20	17.2	31.3	19.9	37.2	15.9	11.9	22.0	14.9	30.2	11.3
21–31	16.7	37.6	20.4	50.4	14.7	10.6	23.9	13.0	35.5	8.8
Prom..	17.10	35.02	19.97	44.13	15.29	12.44	22.49	14.59	31.16	11.43

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CORDOBA, 1887

Tab. VI, 3.

FECHA	Mayo					Junio				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	4.4	20.5	8.1	32.5	2.7	3.4	21.9	9.7	28.3	3.4
2	9.3	26.0	10.3	36.1	5.4	5.3	22.0	9.9	26.2	5.0
3	5.8	26.1	12.1	36.8	3.8	6.0	23.8	10.5	31.1	5.8
4	11.3	19.7	8.7	31.7	7.2	8.5	20.8	7.6	26.5	7.9
5	4.3	16.9	3.8	30.0	3.5	3.2	21.1	8.4	29.0	3.2
6	1.3	17.8	4.5	29.0	*−0.5*	4.0	24.3	9.2	27.0	3.6
7	*0.9*	19.6	5.5	30.8	0.7	9.2	26.3	11.5	31.9	6.7
8	2.8	21.5	7.7	29.8	1.6	7.6	25.2	13.8	27.9	7.3
9	3.8	20.3	5.9	31.9	2.7	6.0	23.0	11.7	31.7	5.9
10	3.3	20.8	8.6	27.6	3.1	14.5	24.2	14.7	28.3	11.3
11	3.0	23.1	6.5	31.5	2.7	13.8	22.8	12.0	25.6	12.6
12	2.7	25.2	7.6	**38.3**	2.5	7.7	21.2	3.6	23.2	5.8
13	6.0	23.8	8.7	33.5	3.7	2.3	23.6	7.3	31.0	2.0
14	4.9	22.5	8.2	30.2	4.6	2.5	25.4	9.2	30.3	2.5
15	9.6	17.9	7.9	20.3	7.6	4.6	24.7	7.8	31.8	4.5
16	4.8	23.3	8.5	28.4	3.9	3.7	22.2	9.2	28.9	3.5
17	3.8	21.2	7.5	28.4	2.8	7.2	23.8	8.4	30.4	6.4
18	2.0	22.6	9.9	25.6	1.2	6.2	21.3	13.4	31.1	5.8
19	4.5	24.5	9.4	28.7	3.9	11.6	14.4	11.7	14.9	11.1
20	3.0	25.7	9.7	31.5	2.7	11.1	15.1	10.7	16.8	11.1
21	5.3	**27.2**	9.8	33.6	4.8	8.3	13.3	4.6	14.8	8.1
22	5.9	25.2	13.5	31.2	5.5	*−1.5*	17.6	3.3	25.3	*−1.8*
23	5.0	25.4	9.5	31.1	4.5	3.3	24.6	7.6	31.3	3.0
24	4.9	26.7	7.0	33.1	4.4	0.6	**27.3**	6.7	**32.6**	0.4
25	8.8	17.8	11.0	18.2	5.3	3.5	25.3	6.9	**32.6**	3.3
26	11.6	22.5	15.0	26.7	10.0	6.1	23.2	6.5	27.4	5.6
27	11.5	11.8	10.1	13.5	11.1	4.0	24.4	8.0	27.1	3.1
28	10.1	18.9	8.8	19.9	9.7	6.6	19.7	6.4	26.4	4.4
29	5.1	21.6	10.0	24.1	4.5	−0.7	15.4	6.0	17.7	−0.9
30	5.6	21.7	9.3	24.9	5.5	1.8	13.5	−1.3	14.5	−1.5
31	4.3	20.4	7.7	27.1	4.2					
1-10	4.7	20.9	7.5	31.6	3.0	6.8	23.3	10.7	28.8	6.0
11-20	4.4	23.0	8.4	29.6	3.6	7.1	21.7	9.3	26.4	6.5
21-31	7.1	21.8	10.2	25.8	6.3	3.2	20.4	5.5	25.0	2.4
Prom..	5.47	21.88	8.74	28.90	4.36	5.68	21.81	8.50	26.72	4.97

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1887

Tab. VI, 4.

FECHA	Julio					Agosto				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	—4.3	17.5	—0.8	24.1	—4.4	13.8	35.4	16.2	38.7	13.0
2	—4.5	19.0	0.6	23.3	—4.8	11.7	28.8	15.0	36.8	11.1
3	—3.0	15.8	—0.5	17.9	—3.1	12.3	30.2	15.1	31.8	10.7
4	—4.7	14.5	0.1	21.1	—4.7	13.0	34.8	20.5	41.4	12.5
5	—1.8	19.4	5.7	22.1	—2.6	15.8	29.4	14.4	35.4	13.9
6	—1.5	21.6	7.1	26 1	—1.7	11.7	33.3	14.3	37.8	11.6
7	2.4	22.5	13.0	27.4	1.6	10.2	32.6	8.0	33.2	8.8
8	12.4	27.3	14.0	29.9	8.5	8.1	19.7	11.9	31.2	3.7
9	13.3	19.2	9.5	23.7	12.6	9.5	29.2	14.7	41.6	8.0
10	3.8	5.3	2.8	6.5	2.5	7.8	29.8	10.5	35.4	6.5
11	0.4	13.2	—0.5	16.2	0.2	7.5	30.8	12.1	38.0	5.4
12	—3.3	15.3	—0.2	21.8	—4.1	8.8	35.8	19.0	38.8	7.5
13	—3.3	16.2	4.9	21.3	—3.7	11.2	30.8	14.8	40.8	10.6
14	—1.2	19.7	3.1	25 6	—1.3	9.9	29.6	9.3	36.8	6.9
15	0.2	20.8	7.2	25.4	—0.3	7.1	30.3	14.7	35.7	4.4
16	2.0	17.7	10.3	26.2	1.1	12.3	31.4	12 2	41.8	12.2
17	9.2	25.1	9.2	33.9	9.2	15.4	30.8	16.2	37.6	10.5
18	2.7	25.8	6.0	29.6	2.2	12.8	33.4	15.5	40.5	11.4
19	2.0	22.0	8.6	25.7	—0.4	9.7	29.8	15.7	36.4	8.5
20	10.2	22.1	13.3	25.3	8.5	13.9	38·7	19.5	48.4	12.9
21	12.0	22.4	13.8	27.7	11.7	16.3	30.5	18.5	36.8	13.1
22	11.7	12.0	10.7	12.7	11.6	12.5	29.7	8.7	39.8	12.2
23	10.2	16.0	10.1	16.3	10.2	5.8	23.6	9.7	34.7	3.9
24	9.7	13.8	8.6	14.8	9.2	5.7	29.6	14.0	41.7	4.5
25	9.8	21.3	11.1	24.3	7.2	7.8	33.4	14.7	43.8	6.5
26	10.4	21.7	11.7	26.5	9.8	11.8	29.2	13.7	36.8	7.2
27	3.6	23.4	9.2	30.8	3.3	9.6	23.9	11.7	32.7	8.9
28	9.3	23.7	12.1	29.0	7.8	5.2	25.5	10.0	35.8	4.1
29	8.7	31.7	11.6	35.4	7.5	6.8	17.5	5.5	27.9	5.4
30	8.7	27.8	15.1	29.4	8.2	6.8	21.8	10.0	35.7	3.5
31	12.8	32.3	17.3	33.2	11.6	9.2	20.3	10.7	22.9	9.0
1–10	1.2	18.2	5.2	22.2	0.4	11.4	30.3	14.1	36.3	9.9
11–20	1.9	19.8	6.2	25.1	1.1	10.9	32.1	14.9	39.5	9.0
21–31	9.7	22.4	11.9	25.5	8.9	8.9	25.9	11.6	35.3	7.1
Prom..	4.45	20.20	7.89	24.32	3.66	10.32	29.34	13.45	36.99	8.64

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1887

Tab. VI, 5.

FECHA	Setiembre					Octubre				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	7.0	14.3	7.9	14.7	6.8	19.8	41.3	25.3	50.4	18.0
2	4.6	22.5	10.5	34.3	*1.6*	21.4	41.6	26.1	51.1	19.1
3	8.1	24.6	8.5	30.9	3.4	19.5	38.9	22.5	44.9	18.7
4	*4.5*	30.2	13.6	42.4	2.4	15.5	13 8	9.7	20.2	15.2
5	9.8	27.6	12.2	37.8	8.2	7.9	16.1	7.5	20.0	6.3
6	12.5	23.8	15.5	28 0	9.1	*6.3*	27.1	11.1	32.6	*3.8*
7	13.8	18.1	10.1	25.2	12.8	8.8	31.1	13.0	38.9	6.0
8	6.2	28.5	12.5	38.2	3.9	11.3	34.1	16.1	38.6	8.9
9	10.5	29.4	14.3	38.7	7.1	14.7	33.7	17.5	37.4	11.6
10	10.0	27.0	10.2	42.3	8.8	16.8	37.3	16.9	41.8	12.0
11	6.3	29.3	12.0	41.0	3.6	15.7	27.2	17.6	33.5	12.7
12	8.9	33.6	15.0	43 3	6.9	14.1	26.0	13.5	27.9	12.3
13	10.6	24.6	11.6	37.4	8.2	9.4	30.4	13.8	34.8	6.0
14	9.9	31.2	9.6	41.8	5.9	13.4	34.0	16.2	34.4	11.0
15	10.4	27.3	9.8	39.2	7.3	12.8	**43.5**	17.9	44.2	9.5
16	5.6	24.5	15.0	28.3	2.6	18.2	39.6	20.3	42.6	11.5
17	8.0	29.8	17.0	36.1	6.0	17.1	16.2	13.5	18.3	16.3
18	11.8	25.5	10.0	25.9	11.3	14.2	22.7	15.8	27.5	11.8
19	8.0	30.9	12.0	36.4	5 0	14.0	36.3	16.9	37.0	12.2
20	10.7	29.7	12.8	33.5	7.5	14.8	39.2	19.7	42.5	11.9
21	9.1	34.6	14.2	39.1	6.0	17.3	24.2	17.4	34.2	14.8
22	13.5	34.8	17.0	40.0	10.4	14.2	18.6	15.5	19.2	12.5
23	9.8	32.0	11.4	35.6	9.5	13.2	22.5	12.2	25.4	13.0
24	6.8	38.4	11.8	42.6	4.2	10.7	21.8	13.0	31.1	8.8
25	7.8	42.7	16.2	50.3	4.5	11.0	26.2	14.2	32.7	8.9
26	9.6	35.6	14.3	41.3	7.0	12.9	24.2	14.4	35.1	10.5
27	11.4	37.1	16.0	43.7	8.0	13.4	34.0	18.0	40.8	10.5
28	12.7	38.8	22.3	47.9	10.1	16.2	40.0	19.4	46.5	11.8
29	15.0	41.6	21.0	50.4	11.1	19.6	23.0	17.0	50.0	16.5
30	20.1	**45.0**	24.3	**52.1**	18.3	15.2	40.5	18.0	**56.5**	12.5
31						14.2	19.0	13.0	21.0	11.5
1–10	8.7	24.6	11.5	33.3	6.4	14.2	31.5	16.6	37.6	12.0
11–20	9.0	28.6	12.5	36.3	6.4	14.4	31.5	16.5	34.3	11.5
21–31	11.6	38.1	16.9	44.3	8.9	14.3	26.7	15.6	33.9	11.9
Prom.	9.77	30.43	13.62	37.95	7.25	14.31	29.81	16.23	35.20	11.81

TEMPERATURA DE LA SUPERFICIE INTERNA DEL SUELO

CÓRDOBA, 1887

Tab. VI, 6.

FECHA	Noviembre					Diciembre				
	7 a.	2 p.	9 p.	M	m	7 a.	2 p.	9 p.	M	m
1	*12.1*	17.3	13.7	20.7	12.0	*15.3*	24.7	17.8	33.8	13.8
2	14.1	27.3	16.7	35.3	12.5	17.5	24.0	16.6	26.0	17.2
3	15.8	38.8	19.5	44.7	12.6	20.2	32.6	20.5	40.7	14.5
4	18.6	17.2	15.0	29.9	14.3	22.7	25.6	21.0	29.8	17.2
5	14.3	30.7	16.9	35 5	11.6	23.6	22.8	20.1	25.2	16.9
6	16.1	40.8	20.0	42.4	11.9	15.9	26.7	17.0	37.9	15.7
7	15.4	**41.0**	16.1	42.8	13.1	19.8	32.1	21.1	46.7	14.9
8	15.6	17.7	16.5	17.8	13.8	20 8	20.2	18.8	40.3	18.6
9	14.0	29.6	18.7	31.2	12.6	15.6	26.5	15.1	50.9	14.3
10	15.9	29.7	15.5	38.5	14.5	16.5	22.0	13.8	27.0	14.6
11	14.8	34.6	18.4	36.8	12.2	20.2	36.6	19.0	42.4	11.5
12	17.3	38.1	21.0	46.4	13.6	21.1	38.5	22.0	56.5	*9.9*
13	18.0	37.5	18.4	**46.8**	13.5	27.7	41.5	25.4	**63.7**	20.3
14	16.0	36.7	18.2	45.7	*11.1*	21.7	33.5	20.0	57.2	18.5
15	17.0	34.0	19.5	44 7	13.8	26.8	39.2	25.4	50.2	16.7
16	18.7	27.2	17.7	46.3	13.5	21.0	39.9	22.7	57.2	20.5
17	18.1	28.8	19.2	37.2	14 4	22.7	43.2	20.8	59.2	19.0
18	19.0	33.6	19.2	45.2	16.6	23.0	40.1	19.0	62.8	16.5
19	19.4	27.8	20.0	28.2	17.1	21.1	40.5	23.9	60.2	15.5
20	21.3	30.1	18.8	36.5	15.8	28.7	**45.7**	26.0	59.3	19.5
21	18.3	20.5	19.6	22.4	16.3	27.7	22.8	19.0	32.2	21.6
22	20.0	21.6	19.7	21.8	17.5	22.3	29.0	19.0	42.1	18.6
23	18.2	28.0	20.7	33.0	17.6	23.2	40.8	24.0	53.7	18.0
24	19.0	27.9	19.3	35.4	17.2	29.2	26.9	22.0	35.7	20.5
25	15.3	20.9	17.4	21.1	14.8	19.0	25.1	20.5	32.8	19.0
26	16.6	17.4	15.3	18.2	15.5	17.0	19.2	26.5	26 5	17.3
27	17.8	28.0	16.3	39.7	13.5	23.5	24.0	17.3	37.0	15.2
28	16.5	33.9	17.2	35.4	11.5	17.2	25.7	18.0	39.0	16.5
29	18.0	34.8	20.8	43.9	12.7	19.4	32.3	19.3	46.4	16.5
30	17.3	20.5	15.3	25.0	16.8	22.2	33.2	22.3	39.8	15.5
31						24.0	39.1	21.0	53.3	15.0
1–10	15.2	29.0	16.9	33.9	12.9	18.8	25.7	18.2	35.8	15.8
11–20	18.0	32.8	19.0	41.4	14.2	23.4	39.9	22.4	56.9	16.8
21–31	17.7	25.4	18.2	29.6	15.3	22.2	28.9	20.8	39.9	17.6
Prom..	16.95	29.07	18.02	34 95	14.13	21.50	31.42	20.48	44.05	16.75

TEMPERATURA DEL SUELO

(Á 7.5 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VII, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	17.6	27.4	21.9	17.5	24.0	20.0	19.0	27.1	23.3
2	*17.3*	29.2	23.6	*16.2*	26.5	22.6	19.2	28.0	24.2
3	19.6	29.7	24.7	18.4	27.5	23.3	19.9	24.7	22.6
4	21.6	33.3	27.7	18.7	27.6	24.0	19.2	25.2	23.4
5	23.6	**33.7**	28.7	19.4	28.9	25.1	21.4	23.2	20.6
6	24.2	29.4	24.0	21 3	31.4	27.6	18.6	25.0	22.0
7	20.6	28.9	24.0	23.7	30.2	28.1	18.4	25.7	22.8
8	21.6	29.7	25.6	23.3	28.1	25.0	19.2	28.2	24.1
9	23.2	23.1	22.7	21.8	29.2	26.2	19.8	29.0	24.4
10	21.7	28.1	24.7	22.6	**31.9**	28.2	20.8	29.5	25.2
11	22.8	31.4	27.1	24.1	27.6	25.6	20.3	21.7	20.7
12	24.7	31.9	23.6	23.3	30.8	27.8	18.6	24.1	22.4
13	22.2	28.5	25.7	24.8	31.8	24.2	19.4	26.2	23.2
14	23.7	23.3	22.7	22.0	24.0	24.0	19.1	28.9	22.2
15	20.0	28.0	23.8	20.9	28.1	24.8	18.6	25.8	22.8
16	20.6	30.3	26.2	21.6	28.0	25.0	18.6	23.6	21.6
17	22.2	29.6	25.4	22.4	26.2	23.8	18.8	25.8	22.4
18	21.7	32.7	28.1	20.1	21.8	20.0	19.4	20.6	19.2
19	24.5	23.8	22.4	16.8	23.2	20.4	18.6	24.4	22.7
20	19.3	26.6	22.4	17.2	24.4	21.0	20.2	27.3	23.5
21	18.9	28.5	24.7	16.7	25.5	21.4	19.6	27.7	23.6
22	21.2	30.0	26.0	17.7	25.2	22.9	19.3	28.1	24.3
23	22.4	25.2	22.7	19.0	26.6	23.8	20.9	**29.6**	24.7
24	20.5	25.7	22.7	20.3	27.9	25.2	20.3	27.7	23.2
25	20.8	27.3	23.6	21.9	29.2	26.3	18.6	27.1	24.0
26	21.5	23.9	22.5	23.4	27.0	22.2	18.9	25.3	20.9
27	20.6	28.6	24.9	18.4	25.8	22.2	*16.6*	27.0	22.7
28	22.9	28.8	25.8	18.6	26.0	22.7	17.9	29.2	24.8
29	23.1	27.1	25.6				19.2	29.5	25.6
30	23.5	24.9	24.4				21.7	28.8	25.8
31	23.7	22.9	21.7				22.8	28.3	25.6
1–10	21.10	29.25	24.76	20.29	28.53	25.01	19.55	26.56	23.26
11–20	22.17	28.61	24.74	21.32	26.59	23.66	19.16	24.84	22.07
21–31	21.74	26.63	24.05	19.50	26.65	23.34	19.62	28.03	24.11
Promedio.	21.67	28.11	24.50	20.43	27.30	24.05	19.45	26.53	23.19

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VII, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	22.4	**28.8**	22.2	*8.4*	13.9	12.8	8.1	13.7	12.6
2	19.2	20.3	19.6	11.0	15.0	14.7	9.6	15.3	12.8
3	18.5	17.8	17.5	11.3	15.6	15.3	9.6	15.2	13.2
4	16.3	20.0	18.0	13.0	15.4	14.4	10.6	13.1	11.3
5	15.6	20.3	17.4	11.2	13.5	12.2	7.8	11.9	11.0
6	15.9	19.6	18.8	8.8	12.4	11.5	7.7	12.6	12.0
7	15.4	19.5	17.7	8.6	12.6	11.7	9.6	14.2	13.0
8	15.1	20.0	17.8	9.1	13.0	12.7	10.5	15.2	14.1
9	15.2	21.5	20.0	9.6	12.9	12.1	10.3	14.8	13.9
10	16.2	16.0	15.0	9.6	13.2	12.7	12.0	17.0	15.0
11	13.2	18.0	16.6	9.9	13.5	13.0	13.2	16.5	14.6
12	13.4	18.2	16.0	9.4	14.0	13.2	10.9	13.1	11.5
13	13.2	17.8	16.6	10.2	14.4	13.6	8.6	14.1	12.9
14	14.3	20.4	18.2	10.5	14.1	13.6	9.3	14.3	12.9
15	14.8	20.4	18.3	12.0	13.9	13.2	9.7	14.4	13.0
16	15.4	18.0	15.7	10.3	14.2	13.6	9.6	14.0	13.0
17	12.6	17.0	15.0	10.3	14.2	13.2	10.9	15.3	13.8
18	12.8	18.8	16.8	9.4	13.4	13.1	11.4	15.3	15.1
19	15.0	20.8	18.2	10.3	14.3	14.2	13.3	13.6	13.0
20	16.0	19.6	18.0	10.4	14.8	14.1	12.7	13.3	12.6
21	16.0	21.6	19.2	11.2	15.4	14.8	11.5	11.7	10.6
22	16.7	20.8	17.4	11.7	15.6	15.0	7.1	11.0	9.9
23	14.3	19.7	18.2	11.8	15.1	14.5	8.4	13.5	12.6
24	14.1	17.9	15.8	11.4	15.4	13.8	8.3	13.6	12.3
25	13.5	18.0	15.2	11.4	13.4	13.4	8.8	13.8	12.4
26	14.7	19.7	16.7	12.8	**15.7**	14.8	10.2	13.6	12.5
27	13.7	16.5	13.6	13.6	13.4	11.6	9.3	13.1	12.3
28	9.5	15.2	13.0	11.3	14.4	13.0	9.6	13.3	11.3
29	*9.6*	15.8	12.6	*8.4*	15.3	13.4	7.7	10.3	9.5
30	11.0	16.6	12.8	9.5	15.2	12.9	*6.3*	8.9	7.3
31				*8.4*	13.9	11.8			
1-10	16.98	20.38	18.40	10.06	13.75	13.01	9.58	14.30	12.89
11-20	14.07	18.90	16.94	10.27	14.08	13.48	10.96	14.39	13.24
21-31	13.35	18.18	15.45	11.05	14.80	13.55	8.72	12.28	11.07
Promedio.	14.80	19.15	16.93	10.48	14.23	13.35	9.75	13.66	12.40

TEMPERATURA DEL SUELO

(Á 7.5 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VII, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	3.9	8.6	7.2	15.7	20.3	19.3	11.8	12.4	12.1
2	3.3	7.9	6.9	15.6	20.3	18.5	*9.5*	14.5	13.6
3	4.0	7.6	6.5	15.3	19.1	18.3	11.8	15.7	14.6
4	*3.0*	7.3	6.3	15.5	21.6	20.9	10.5	18.9	17.3
5	3.6	8.1	7.9	17.3	20.7	19.2	13.6	19.0	17.5
6	4.7	10.1	10.0	16.1	20.3	18.7	15.3	17.5	16.7
7	7.3	11.6	12.3	15.6	18.3	16.3	15.5	17.0	15.3
8	11.7	15.5	14.7	12.3	15.9	14.7	11.9	18.7	16.9
9	13.5	14.7	12.8	13.1	18.8	17.3	13.5	19.3	17.6
10	9.4	8.5	7.4	13.8	18.4	16.6	14.5	20.8	17.5
11	5.9	7.8	6 3	12.8	17.8	17.3	12.7	19.5	17.6
12	3.2	7.7	6.3	13.6	19.3	19.2	14.3	20.7	19.3
13	3.3	8.0	7.4	15.8	21.1	19.3	15.1	19.6	17.6
14	5.0	10.0	8.5	14.6	19.3	17.3	13.7	19.9	17.4
15	5.9	10.9	10.3	12.7	17.3	16.5	14.3	19.8	17.3
16	7.0	10.1	10.7	14.9	20.0	18.3	12.4	16.6	16.5
17	9.7	13.9	12.6	16.5	20.3	19.5	13.3	18.7	18.1
18	8.7	14.0	12.0	16.4	21.5	20.3	15.5	16.3	15.6
19	7.5	11.5	11.0	15.9	20.3	19.5	12.3	18.5	17.0
20	10.3	13.3	13.1	16.9	**22.8**	21.0	13.9	18.5	16.9
21	12.6	15.3	14.7	18.3	20.9	20.3	13.3	19.9	18.4
22	13.0	13.0	12.0	17.1	20.5	17.7	15.5	21.3	19.9
23	11.3	11.1	11.8	13.5	18.0	16.3	16.2	19.0	17.3
24	10.8	12.0	11.5	12.4	18.9	18.3	13.2	19.8	18.4
25	10.5	13.0	14.3	14.3	20.6	19.3	13.4	22.7	20.5
26	11.3	14.0	12.3	14.8	19.9	18.3	15.7	21.9	20.0
27	9.1	14.9	13.3	14.5	17.6	15.8	15.6	22.6	20.7
28	11.3	16.1	14.7	12.5	17.8	15.8	16.9	24.3	23.1
29	11.7	17.2	16.3	13.1	15.3	13.6	18.4	26.2	24.1
30	12.5	17.1	16.8	*11.0*	15.9	14.5	21.7	**27.9**	25.7
31	14.6	**18.8**	18.2	12.7	13.9	13.7			
1–10	6.44	9.99	9.20	15.03	19.37	17.98	12.79	17.38	15.91
11–20	6.65	10.72	9.82	15.01	19.97	18.82	13.75	18.81	17.33
21–31	11.70	14.77	14.17	14.02	18.12	16 69	15.99	22.56	20.81
Promedio.	8.37	11.92	11.16	14.71	19.12	17.79	14.18	19.58	18.02

TEMPERATURA DEL SUELO

(Á 7.5 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. VII, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	22.6	28.5	26.7	*14.8*	16.3	15.3	16.4	19.7	19.0
2	23.3	**29.3**	27.5	*14.8*	19.8	18.6	18.1	19.8	18.4
3	23.8	27.4	25.4	16.3	22.2	20.7	17.2	24.0	21.7
4	21.3	20.1	17.0	18.0	19.8	17.6	19.9	22.7	21.7
5	13.3	15.8	13.5	*14.8*	21.5	19.6	20.1	21.3	20.9
6	*10.2*	18.8	16.3	16.0	23.2	21.6	18.7	22.7	20.0
7	12.0	20.7	17.8	17.3	22.1	19.9	18.1	23.1	21.5
8	14.0	21.1	19.3	17.2	17.6	17.7	20.2	22.6	20.2
9	16.1	22.2	20.7	15.3	20.3	19.8	17.4	22.7	18.7
10	17.2	23.7	21.3	17.0	20.8	18.7	17.3	19.2	17.3
11	17.5	21.5	20.0	15.3	21.6	20.1	*15.5*	24.3	21.3
12	15.9	19.8	17.9	17.0	24.7	21.4	18.3	27.3	24.3
13	13.7	19.7	17.7	18.5	24.8	21.5	22.3	**31.3**	26.4
14	15.3	19.4	18.6	17.3	23.6	21.1	22.4	27.5	24.2
15	15.6	22.3	21.4	18.0	24.3	22.1	21.3	28.2	25.4
16	17.5	23.7	22.3	18.6	24.2	20.6	23.3	28.1	24.5
17	19.5	18.6	15.5	17.6	23.3	21.3	21.7	28.4	24.4
18	15.3	20.3	17.9	19.3	**26.0**	21.7	21.5	27.1	24.2
19	15.6	21.5	19.7	19.3	21.4	21.3	21.2	28.4	25.4
20	16.3	23.9	21.8	18.8	24.0	21.0	23.4	31.2	28.2
21	18.3	22.0	19.8	19.0	19.8	20.5	25.0	23.2	23.1
22	15.9	17.3	17.0	19.1	19.9	20.2	21.7	26.3	22.5
23	15.5	18.1	16.3	18.8	22.3	21.4	21.4	29.2	26.0
24	13.1	16.7	15.5	19.3	23.8	20.9	23.3	25.5	24.2
25	12.9	17.9	16.3	18.0	19.0	19.0	21.8	24.8	23.3
26	13.9	18.6	17.3	17.4	17.7	16.8	20.9	21.1	19.5
27	14.3	20.3	19.3	16.3	22.8	19.3	18.6	22.7	20.2
28	16.3	23.3	21.3	15.8	23.8	19.9	18.8	23.2	20.3
29	19.3	21.3	18.3	17.1	24.1	21.8	19.0	24.2	21.4
30	16.3	22.1	19.3	19.0	19.8	18.3	18.3	26.4	22.0
31	16.4	17.4	15.8				19.2	28.2	23.8
1–10	17.38	22.76	20.55	16.15	20.36	18.95	18.34	21.78	19.94
11–20	16.22	21.07	19.28	17.97	23.79	21.21	21.09	28.18	24.83
21–31	15.65	19.55	17.84	17.98	21.30	19.81	20.73	24.98	22.39
Promedio	16.39	21.07	19.18	17.37	21.82	19.99	20.07	24.98	22.39

TEMPERATURA DEL SUELO

(Á 15 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VIII, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	*20.0*	23.2	23.2	20.3	21.2	21.6	21.0	23.2	23.7
2	*20.0*	24.0	24.2	*18.8*	21.7	22.8	21.3	23.7	24.6
3	21.4	24.5	25.0	20.3	22.8	23.6	21.8	23.2	23.1
4	22.7	26.8	27.3	20.9	22.9	24.3	21.0	22.6	23.3
5	24.6	28.4	**28.5**	21.5	23.8	24.9	19.9	22.1	21.6
6	25.5	27.9	25.9	22.7	25.7	27.1	20.1	22.3	22.4
7	22.9	25.4	25.0	24.7	26.8	27.6	20.2	22.5	23.0
8	22.8	25.9	26.0	25.1	25.6	25.7	20.8	24.0	24.3
9	24.3	23.6	23.6	23.6	25.4	26.7	21.7	24.8	24.9
10	22.6	24.6	25.0	24.2	26.8	**28.0**	22.5	25.3	25.8
11	23.6	26.7	26.9	25.4	25.7	26.1	22.5	22.0	21.8
12	25.3	28.4	25.3	24.3	25.7	27.6	20.5	21.7	22.6
13	23.3	25.3	25.9	25.7	27.8	27.6	20.9	23.6	23.6
14	24.4	24.2	23.6	23.5	24.5	24.6	21.2	24.3	23.2
15	21.7	24.4	24.7	22.6	24.7	25.2	20.8	23.3	23 2
16	22.2	25.6	26.3	23.2	24.7	25.3	21.0	21.8	20.2
17	23.7	25.7	25.7	22.6	24.9	24.9	20.3	23.2	23.1
18	23.3	27.1	27.8	22.0	21.7	21.4	21.0	21.1	20.3
19	24.4	23.5	23.5	19.1	20.6	21.4	19.6	21.7	22.5
20	21.2	23.5	23.6	19.3	21.0	21.8	21.1	23.6	23.8
21	20.9	24.1	25.1	19.2	21.8	22.0	21.4	24.3	24.3
22	22.6	25.4	26.2	19.7	22.0	23.0	21.5	24.5	24.6
23	23.6	25.5	23.8	20.7	23.0	23.6	22.3	25.4	25.3
24	22.2	24.3	23.4	21.6	23.9	24.9	22.4	24.6	24.4
25	21.9	23.9	24.2	22.9	25.4	25.9	21.1	23.6	24.3
26	22.5	23.2	23.2	24.3	24.9	23.8	21.4	22.7	22.6
27	21.8	24.7	25.0	20.9	22.6	23.2	*19.5*	22.8	23.4
28	23.6	25.5	25.8	20.8	22.6	23.5	20.5	24.0	24.8
29	24.1	25.3	25.6				21.6	25.2	25.5
30	24.3	24.7	24.6				23.2	**25.8**	**25.8**
31	24.1	24.0	22.9				23.9	25.6	25.8
1–10	22.68	25.43	25.37	22.21	24.27	25.23	21.03	23.37	23.67
11–20	23.31	25.44	25.33	22.77	24.13	24.59	20.89	22.63	22.43
21–31	22.87	24.60	24.53	21.26	23.27	23.74	21.71	24.41	24.62
Promedio	22.95	25.14	25.06	22.14	23.94	24.58	21.23	23.50	23.61

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VIII, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.7	25.8	23.8	12.6	13·7	14.5	11.2	12.0	13.2
2	21.4	20.8	20.7	13.4	14.3	15.5	11.4	12.4	13.7
3	19.6	18.8	18.4	13.8	14.5	15.6	11.8	12.8	14.3
4	17.6	19.0	19.0	14.4	14.7	15.1	12.6	12.9	13.2
5	17.4	19.0	19.2	13.3	13.4	13.5	11.1	11.6	12.5
6	17.4	18.5	18.8	11.5	11.8	12.5	10.7	11.6	13.0
7	17.2	18.3	18.5	10.9	11.5	12.4	11.8	12.8	14.0
8	16.8	18.5	18.6	11.2	11.8	12.8	12.8	13.6	14.5
9	16.8	19.1	19.8	11.4	11.8	12.5	13.3	13.7	14.4
10	17.8	17.0	16.4	11.3	11.9	12.9	14.0	15.2	15.9
11	15.2	16.8	17.1	11.6	12.1	13.2	15.3	15.9	15.8
12	15.4	16.8	16.9	11.4	12.4	13.4	13.7	13.7	13.6
13	15.2	16.6	17.0	11.8	12.6	13.7	11.2	12.1	13.4
14	15.8	18.0	18.4	12.2	12.8	13.6	11.5	12.2	13.4
15	16.4	18.3	19.0	12.6	13.1	13.6	11.7	12.5	13.6
16	17.2	17.8	17.2	12.0	12.5	13.6	11.6	12.2	13.3
17	15.0	16.2	16.4	12.0	12.5	13.6	12.1	13.1	14.0
18	14.7	16.8	16.5	11.5	12.0	13.0	12.6	13.3	14.5
19	16.4	18.4	18.7	11.8	12.6	13.9	13.7	13.6	13.5
20	17.2	18.5	18.5	12.2	12.8	14.2	13.1	13.2	13.2
21	17.3	19.3	19.4	12.4	13.2	14.6	12.5	12.2	11.7
22	17.9	18.8	18.4	13.2	13.7	14.6	9.9	10.2	11.1
23	16.5	18.0	18.6	13.3	13.6	14.4	9.9	11.2	12.6
24	16.6	17.3	17.2	13.0	13.6	14.3	10.6	11.2	12.6
25	15·7	16 8	16.7	12.6	13.0	13.5	10.6	11.6	12.8
26	15.7	17.5	17.5	13.2	13.9	14.7	11.3	11.9	12.7
27	15.6	16.2	15.4	14.2	13.8	13.3	10.9	11.4	12.4
28	13.1	14.4	14.6	12.5	13.1	13.6	11.1	11.8	12.4
29	*12.4*	14.0	15.0	*10.6*	12.6	13.8	10.3	10.0	10.4
30	13.6	15.5	15.3	11.8	12.8	13.9	*8.6*	8.7	8.8
31				11.6	12.4	13.2			
1–10	18.57	19.48	19.32	12.38	12.94	13.73	12.07	12.86	13.87
11–20	15.85	17.42	17.57	11.91	12.54	13.58	12.65	13.18	13.83
21–31	15.44	16.78	16.81	12.58	13.25	13.99	10.57	11.02	11.75
Promedio	16.62	17.89	17.90	12.30	12.92	13.77	11.76	12.35	13.15

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. VIII, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	6.7	7.3	8.6	16.2	17.1	18.4	13.4	13.1	13.0
2	6.7	6.7	7 8	16.5	17.4	18.3	*11.8*	12.5	13.8
3	6.3	6.5	7.4	16.5	17.0	18.0	13.0	13.7	14.8
4	*5.7*	6.1	7.2	16.5	18.0	19.7	12.9	14.8	16.4
5	*5.7*	6.4	7.8	18.1	18.3	18.7	15.0	16.0	17.2
6	6.7	7.6	9.4	17.2	17.7	18.7	15.6	15.9	16.6
7	8.3	9.2	11.0	17.1	16.9	17.3	16.1	16.4	16.1
8	11.2	12.4	13.7	14.5	14.8	15.4	14.2	15.7	16.6
9	13.2	13.3	13.2	14.5	15.6	17.0	15.0	16.1	17.3
10	11.3	10.2	9.2	15.5	16.1	17.0	15.8	17.0	17.7
11	8.0	7.8	8.0	14.7	15.4	16.9	15.2	16.4	17.6
12	6.1	6.4	7.4	15.2	16.2	18.1	15.9	17.4	18.7
13	*5.7*	6.4	7.7	16.9	18.0	**20.8**	16.9	17.5	17.6
14	6.8	7.6	8.8	16.6	17.0	17.7	15.7	16.7	17.8
15	7.5	8.3	9.9	15.2	15.5	16.6	15.9	16.9	17.7
16	8.5	9.0	10.2	15.8	17.0	18.3	15.0	15.4	16.3
17	10.0	10.9	12.2	16.4	17.7	19.0	15.2	16.4	17.4
18	10.3	11.1	12.2	17.5	18.4	19.7	16.5	16.3	16.3
19	9.8	10.0	11.2	17.6	18.2	19.2	14.6	15.5	16.8
20	10.7	11.4	12.4	17.9	19.0	20.6	15.4	16.1	16.9
21	12.5	13.0	14.0	19.0	19.2	20.0	15.1	16.5	17.9
22	13.3	13.3	12.6	18.5	18.5	18.9	16.6	17.8	19.2
23	12.0	12.0	12.4	16.3	16.7	17.2	17.7	17.4	17.8
24	11.6	11.6	11.9	15.0	16.1	17.8	15.6	17.1	18.4
25	11.3	11.8	12.4	16.2	17.2	18.8	15.8	17.8	19.6
26	11.9	12.4	13.2	16.7	17.4	18.2	17.6	18.6	19.7
27	11.2	12.0	13.4	16.4	16.4	16.6	17.5	18.9	20.4
28	12.1	13.2	14.4	14.9	15.7	16.8	18.5	20.3	22.4
29	13.0	14.2	15.8	15.0	15.0	14.9	20.0	23.3	23.4
30	13.9	14.5	16.1	*13.2*	14.0	15.0	21.9	24.2	**25.0**
31	15.0	15.9	**17.4**	14.0	13.8	14.3			
1–10	8.13	8.57	9.53	16.26	16.89	17.85	14.28	15.12	15.95
11–20	8.31	8.89	10.00	16.38	17.24	18.69	15.63	16.46	17.31
21–31	12.53	13.08	13.96	15.93	16.36	17.14	17.63	19.09	20.38
Promedio.	9.76	10.27	11.25	16.18	16.83	17.87	15.85	16.89	17.88

TEMPERATURA DEL SUELO

(Á 15 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. VIII, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.1	25.2	25.8	16.0	16.2	16.6	17.6	18.6	19.2
2	23.9	26.1	26.6	*15.8*	17.8	18 6	18.7	19.0	19.2
3	24.6	25.1	25.2	17.1	19.6	20.7	17.7	21.4	21.7
4	22.7	21.4	19.2	18.7	19.7	18.6	20.2	21.7	21.8
5	16.5	16.3	15.8	16.3	19.0	20.0	20.6	21.0	21.2
6	*13.3*	15.9	17.0	17.3	20.0	21.5	19.9	20.9	20.5
7	14.4	17.3	18.2	18.4	20.0	20.6	18.9	21.5	21.6
8	15.9	18.4	19.3	18.3	18.1	18.2	20.7	22.5	21.1
9	17.2	19.4	20.4	16.3	18.6	19.8	19.1	20.2	19.8
10	18.5	20.7	21.3	18.1	19.2	19.6	18.2	19.0	18.4
11	18.8	20.3	20.3	16.7	18.9	20.3	*16.6*	20.6	21.2
12	18.3	18.8	18.6	19.1	21.1	22.0	19.2	23.3	23.8
13	16.0	17.7	18.4	19.5	21.8	21.8	23.2	26.8	26.3
14	16.7	18.0	18.7	18.7	20.8	21.6	23.2	24.8	24.5
15	17.0	19.7	21.2	19.1	21.4	22.2	21.9	25.3	25.8
16	18.8	20.8	21.8	19.7	22.3	21.4	24.2	25.3	25.0
17	20.3	19.6	18.3	19.0	21.3	21.7	22.2	25.4	24.7
18	16.8	18.5	18.6	20.1	22.8	22.8	23.3	25.4	24.5
19	17.0	19.0	19.6	20.3	20.9	21.5	22.2	25.4	25.4
20	17.6	20.3	19.6	19.8	22.1	21.6	24.0	27.6	27.3
21	19.4	20.7	20.2	19.9	20.9	20.8	25.6	24.1	23.6
22	17.6	17.6	17.6	19.8	20.1	20.3	22.3	24.8	23.5
23	16.7	17.3	17.2	19.7	21.2	21.6	21.9	25.5	26.1
24	14.6	15.6	16.1	20.1	22.1	21.5	23.8	25.2	24.7
25	14.4	16.1	16.8	19.5	19.3	19.5	22.9	23.7	23.8
26	15.1	16.9	17.4	18.5	18.2	17.7	22.0	21.5	20.8
27	15.6	17.1	18.4	16.9	20.0	20.0	19.5	21.7	21.1
28	17.2	20.1	21.2	17.3	20.7	20.4	19.7	21.5	21.3
29	19.8	20.4	18.6	18.1	21.1	21.6	19.9	22.3	22.0
30	17.4	19.4	19.9	20.0	19.4	19.0	19.4	23.8	22.3
31	17.8	17.6	16.4				20.3	25.2	24.5
1-10	19.01	20.58	20.88	17.23	18.82	19.42	19.16	20.58	20.45
11-20	17.73	19.27	19.51	19.10	21.34	21.69	21.80	24.99	24.85
21-31	16.87	18.07	18.16	18.98	20.30	20.24	21.57	23.57	23.06
Promedio.	17.81	19.27	19.47	18.44	20.15	20.45	20.87	23.06	22.80

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. IX, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.6	23.0	23.1	24.0	23.3	23.0	23.0	22.7	22.8
2	23.1	*22.6*	22.9	22.7	22.2	22.3	23.1	22.8	22.9
3	23.2	22.9	23.2	22.6	22.3	22.5	23.3	23.0	23.0
4	23.5	23.3	23.9	22.9	22.5	22.7	23.0	22.7	22.7
5	24.6	24.5	24.9	23.1	22.8	23.1	23.0	22.8	22.7
6	25.5	25.3	**25.6**	23.6	23.4	23.8	22.5	22.2	22.4
7	25.4	24.8	24.7	24.5	24.5	24.8	22.4	22.1	22.2
8	24.6	24.3	24.4	25.3	25.1	25.1	22.5	22.3	22.6
9	24.7	24.5	24.3	25.1	24.8	24.9	22.9	22.8	23.0
10	24.1	23.8	23.9	25.2	24.9	25.4	23.5	23.2	23.5
11	24.2	24.0	24.5	25.8	25.6	25.5	23.9	23.6	23.3
12	24.9	25.0	25.2	25.5	25.2	25.5	23.0	22.6	22.5
13	25.2	24.7	24.8	25.9	25.8	**26.0**	22.7	22.5	22.7
14	24.9	24.8	24.6	**26.0**	25.5	25.2	22.9	22.7	22.9
15	24.3	23.8	23.9	25.0	24.6	24.7	22.9	22.6	22.7
16	24.0	23.7	24.2	24.8	24.5	24.7	22.8	22.5	22.4
17	24.6	24.4	24.6	24.9	24.6	24.7	22.4	22.2	22.6
18	24.8	24.5	25.0	24.6	24.1	23.7	22.5	22.4	22.2
19	25.5	25.2	24.8	23.2	23.7	22.5	21.8	*21.6*	21.7
20	24.3	23.7	23.8	22.4	22.0	22.0	22.0	22.0	22.3
21	23.7	23.2	23.5	22.2	21.7	21.8	22.7	22.5	22.8
22	24.0	23.8	24.1	22.0	21.8	21.9	23.0	22.8	22.6
23	24.6	24.5	24.7	22.3	22.1	22.3	23.3	23.1	23.4
24	24.5	24.1	24.2	22.8	22.6	22.9	23.8	23.5	23.6
25	24.0	23.6	23.7	23.4	23.3	23.6	23.6	23.2	23.2
26	23.9	23.6	23.6	24.1	24.1	24.2	23.4	23.1	23.0
27	23.5	23.2	23.5	23.9	23.3	23.2	22.8	22.4	22.4
28	23.9	23.9	24.3	23.2	22.8	22.8	22.7	22.4	22.7
29	24.7	24.6	24.7				23.2	22.9	23.2
30	24.9	24.8	24.8				23.7	23.5	23.8
31	24.7	24.6	24.5				**24.2**	24.1	**24.2**
1-10	24.23	23.90	24.09	23.90	23.58	23.76	22.92	22.66	22.78
11-20	24.67	24.38	24.54	24.81	24.46	24.45	22.69	22.47	22.53
21-31	24.22	23.99	24.15	22.99	22.71	22.81	23.31	23.05	23.17
Promedio	24.37	24.09	24.25	23.96	23.65	23.71	22.98	22.74	22.84

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. IX, 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	24.5	21.3	21.4	16.3	15.9	15.7	13.5	13.2	13.2
2	24.2	23.7	23.2	15.8	15.6	15.7	13.3	13.1	13.1
3	22.7	22.2	21.5	16.0	15.8	15.8	13.3	13.1	13.3
4	20.9	20.5	20.4	16.2	16.0	16.0	13.5	13.5	13.4
5	20.3	20.0	20.0	16.0	15.7	15.5	13.4	13.1	12.9
6	20.0	19.7	19.7	15.2	14.7	14.5	13.0	12.8	12.7
7	19.7	19.4	19.6	14.4	14.0	13.9	13.0	12.9	13.1
8	19.4	19.1	19.1	13.9	13.7	13.7	13.4	13.4	13.6
9	19.2	19.0	19.2	13.9	13.7	13.6	13.9	13.8	13.9
10	19.5	19.4	19.1	13.7	13.5	13.5	14.0	14.1	14.4
11	18.7	18 3	18.3	13.7	13.6	13.5	14.8	15.0	15.1
12	18.2	18.0	18.0	13.7	*13.5*	*13.5*	15.2	14.9	14.8
13	18.0	17.7	17.7	13.7	13.6	13.7	14.4	13.9	13.7
14	17.8	17.7	17.9	13.9	13.7	13.8	13.8	13.5	13.5
15	18.3	18.2	18.4	13.9	13.9	14.0	13.6	13.4	13.3
16	18.6	18.5	18.6	14.0	13.8	13.8	13.5	13.3	13.2
17	18.4	18.0	17.9	14.0	13.7	13.7	13.4	13.3	13.4
18	17.8	17.5	17.7	13.8	13.5	*13.5*	13.6	13.5	13.6
19	18.0	18.0	18.2	13.6	*13.5*	13.5	14.0	14.0	14.0
20	18.6	18.6	18.6	13.8	13.6	13.8	14.0	13.9	13.9
21	18.9	18.8	19.0	14.0	13.8	13.9	13.8	13.7	13.5
22	19.3	19.1	19.2	14.2	14.1	14.1	13.2	12.8	12.5
23	19.1	18.8	18.8	14.4	14.3	14.3	12.4	12.2	12.2
24	19.0	18.7	18.5	14.4	14.3	14.2	12.5	12.3	12.3
25	18.5	18.2	18.1	14.3	14.1	14.1	12.5	12.3	12.3
26	18.1	17.9	18.0	14.1	14.0	14.2	12.5	12.5	12.5
27	18.2	17.9	17.8	14.5	14.6	14.6	12.7	12.4	12.4
28	17.5	16.9	16.7	14.4	14.2	14.2	12.5	12.4	12.4
29	16.6	16.1	*16.1*	14.1	13.8	13.8	12 5	12.2	11.9
30	16.2	16.1	16.2	13.9	13.7	13.6	11.7	11.3	*11.1*
				13.8	13.5	*13.5*			
1-10	21.01	20.73	20.62	15.14	14.86	14.79	13.43	13.30	13.36
11-20	18.21	18.05	18.13	13.81	13.64	13.68	14.03	13.87	13.85
21-31	18.14	17.85	17.81	14.19	14.04	14.05	12.63	12.41	12.31
Promedio	19.14	18.88	18.86	14.37	14.17	14.17	13.36	13.19	13.17

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA. 1887

Tab. IX, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	10.7	10.3	10.1	15.1	15.2	15.5	15.2	15.0	14.8
2	9.9	9.6	9.4	15.9	15.9	16.0	14.6	14.3	14.2
3	9.3	9.1	9.0	16.3	16.2	16.2	14.4	14.3	14.4
4	9.0	8.7	8.7	16.5	16.4	16.6	14.7	14.4	14.6
5	8.7	8.5	8.5	17.2	17.2	17.3	15.2	15.2	15.4
6	8.7	8.6	8.7	17.4	17.2	17.2	15.9	15.8	15.8
7	9.2	9.2	9.5	17.3	17.2	17.0	16.1	16.1	16.2
8	10.1	10.4	10.9	16.8	16.3	16.0	16.1	15.8	15.8
9	11.7	11.9	12.2	15.8	15.6	15.7	16.1	15.9	16.0
10	12.3	12.1	11.7	16.0	15.9	16.0	16.4	16.2	16.4
11	11.1	10.6	10.3	15.9	15.6	15.6	16.6	16.3	16.4
12	9.9	9.4	9.1	15.9	15.7	15.8	16.7	16.5	16.8
13	9.0	8.7	8.6	16.5	16.6	16.8	17.2	17.1	17.1
14	8.7	8.7	8.7	17.2	17.0	17.0	17.2	16.9	16.9
15	9.0	8.9	9.1	17.0	16.6	16.4	17.0	16.8	16.9
16	9.5	9.4	9.6	16.4	16.3	16.5	17.0	16.6	16.5
17	9.9	10.0	10.3	16.8	16.8	17.0	16.5	16.4	16.5
18	10.8	10.7	10.8	17.4	17.3	17.5	16.8	16.8	16.7
19	11.1	10.9	10.8	17.9	17.7	17.8	16.6	16.3	16.3
20	10.9	11.0	11.1	18.0	17.9	18.2	16.5	16.3	16.3
21	11.6	11.8	12.1	18.6	18.5	18.6	16.5	16.3	16.5
22	12.5	12.6	12.7	18.8	18.6	18.5	16.9	16.9	17.2
23	12.6	12.5	12.5	18.3	17.8	17.6	17.7	17.6	17.6
24	12.5	12.3	12.3	17.4	17.0	17.0	17.5	17.2	17.2
25	12.3	12.2	12.2	17.3	17.1	17.2	17.5	17.1	17.4
26	12.4	12.3	12.4	17.6	17.4	17.4	17.9	17.8	18.0
27	12.6	12.4	12.4	17.6	17.3	17.1	18.3	18.1	18.3
28	12.6	12.5	12.7	17.0	16.7	16.6	18.8	18.6	19.0
29	13.1	13.0	13.3	16.7	16.4	16.3	19.6	19.5	19.9
30	13.7	13.6	13.8	16.0	15.6	15.5	20.5	20.6	21.1
31	14.3	14.3	14.6	15.5	15.4	15.2			
1–10	9.96	9.84	9.87	16.43	16.31	16.35	15.47	15.30	15.36
11–20	9.99	9.83	9.84	16.90	16.75	16.86	16.81	16.60	16.64
21–31	12.75	12.68	12.82	17.35	17.07	17.00	18.12	17.97	18.22
Promedio	10.96	10.85	10.91	16.91	16.72	16.75	16.80	16.62	16.74

TEMPERATURA DEL SUELO

(Á 36 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. IX, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	21.7	21.7	22.1	18.8	18.5	18.2	20.1	19.6	19.5
2	22.6	22.6	22.9	18.1	*17.9*	18.1	19.6	19.6	19.6
3	23.4	23.3	23.3	18.4	18.3	18.5	19.6	19.4	19.8
4	23.3	22.9	22.4	19.1	20.0	19.1	20.3	20.3	20.6
5	21.4	20.5	19.8	19.0	18.6	18.7	20.8	20.8	20.8
6	19.1	18.3	18.2	19.0	18.8	19.0	20.9	20.8	20.7
7	18.2	17.8	17.9	19.4	19.2	19.3	20.6	20.4	20.5
8	18.2	18.0	18.2	19.5	19.2	19.1	20.8	20.8	21.0
9	18.6	18.5	18.7	18.9	18.7	18.8	21.0	20.7	20.5
10	19.2	19.2	19.4	19.2	19.0	19.1	20.3	20.1	19.9
11	19.8	19.6	19.7	19.0	18.7	18.8	19.6	*19.3*	19.6
12	19.8	19.6	19.4	19.1	19.0	19.3	20.1	20.1	20.6
13	19.3	18.8	18.8	19.9	19.8	19.9	21.2	21.4	20.1
14	18.8	18.6	18.6	20.2	19.9	20.1	22.8	22.8	22.9
15	18.8	18.6	18.9	20.3	20.1	20.3	23.0	22.8	23.1
16	19.5	19.4	19.7	20.7	20.5	20.7	23.6	23.6	23.7
17	20.2	20.2	20.0	20.8	20.5	20.7	23.8	23.5	23.7
18	19.6	19.2	19.1	20.8	20.7	20.9	23.8	23.5	23.7
19	19.1	18.9	19.0	21.2	20.9	21.0	23.8	23.5	23.9
20	19.3	19.1	19.3	21.1	20.9	21.1	24.1	24.0	24.6
21	19.9	19.8	19.9	21.2	21.0	20.8	25.0	25.0	24.8
22	19.9	19.5	19.3	20.8	20.7	20.6	24.4	24.0	24.1
23	19.0	18.7	18.6	20.6	20.5	20.7	23.8	23.5	23.8
24	18.4	17.9	17.7	20.9	20.9	21.0	24.1	24.2	24.3
25	17.6	17.3	17.3	21.0	20.8	20.8	24.3	24.1	24.0
26	17.4	*17.2*	17.3	20.3	20.1	19.8	23.8	23.6	23.3
27	17.4	17.4	17.4	19.4	19.2	19.4	22.8	22.5	22.4
28	18.0	18.1	18.8	19.6	19.4	19.6	22.2	22.0	21.9
29	19.2	19.4	19.5	19.8	19.6	19.9	21.9	21.7	21.8
30	19.5	19.3	19.4	20.4	20.3	20.2	21.9	21.7	22.0
31	19.5	19.3	19.1				22.3	23.1	22.6
1-10	20.57	20.28	20.29	18.94	18.82	18.79	20.40	20.25	20.29
1-20	19.42	19.20	19.25	19.31	20.10	20.28	22.58	22.45	22.58
1-31	18.71	18.54	18.57	20.40	20.25	20.28	23.32	23.22	23.18
Promedio	19.54	19.31	19.35	19.55	19.72	19.78	22.14	22.01	22.05

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. X, 1.

FECHA	Enero			Febrero			Marzo		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.6	23.5	23.4	23.8	23.7	23.5	22.8	22.8	22.8
2	23.2	23.1	23.0	23.3	23.1	22.8	22.8	22.8	22.8
3	22.9	22.9	22.9	22.8	22.7	22.6	22.8	22.8	22.8
4	22.9	22.9	23.0	22.6	22.6	22.6	22.8	22.8	22.8
5	23.1	23.2	23.3	22.6	22.7	22.7	22.7	22.7	22.6
6	23.5	23.7	23.8	22.8	22.8	22.9	22.6	22.6	22.4
7	24.0	24.0	24.0	23.0	23.2	23.3	22.4	22.4	22.3
8	23.9	23.8	23.8	23.5	23.6	23.8	22.3	22.3	22.2
9	23.7	23.7	23.7	23.8	23.9	23.9	22.3	22.4	22.4
10	23.7	23.6	23.5	23.9	24.0	24.0	22.5	22.6	22.6
11	23.5	23.5	23.5	24.0	24.2	24.2	22.8	22.9	22.9
12	23.6	23.6	23.8	24.3	24.3	24.4	22.9	22.8	22.7
13	23.9	24.0	24.0	24.4	24.4	24.5	22.6	22.5	22.5
14	24.0	24.0	24.0	24.6	24.6	24.6	22.5	22.5	22.5
15	23.9	23.8	23.6	24.5	24.4	24.3	22.5	22.5	22.5
16	23.6	23.6	23.5	24.2	24.2	24.2	22.5	22.5	22.4
17	23.5	23.6	23.6	24.1	24.1	24.1	22.3	22.3	22.4
18	23.7	23.8	23.8	24.1	24.1	24.0	22.2	22.3	22.2
19	23.9	24.0	24.0	23.8	23.7	23.4	22.2	22.1	22.0
20	24.0	23.9	23.8	23.2	23.1	22.9	21.9	21.9	21.9
21	23.7	23.6	23.4	22.8	22.7	22.6	22.0	22.1	22.1
22	23.4	23.4	23.4	22.5	22.4	22.4	22.2	22.3	22.4
23	23.5	23.6	23.6	22.4	22.4	22.4	22.4	22.5	22.6
24	23.7	23.7	23.7	22.4	22.4	22.4	22.7	22.8	22.8
25	23.6	23.6	23.5	22.6	22.7	22.8	22.9	22.9	22.8
26	23.4	23.4	23.4	22.9	23.0	23.1	22.8	22.8	22.8
27	23.3	23.2	23.2	23.2	23.2	23.1	22.7	22.7	22.7
28	23.2	23.2	23.2	23.1	23.0	22.9	22.5	22.5	22.4
29	23.4	23.5	23.6				22.4	22.5	22.5
30	23.7	23.7	23.8				22.6	22.7	22.8
31	23.8	23.8	23.8				22.8	23.0	23.0
1–10	23.45	23.44	23.44	23.21	23.23	23.21	22.60	22.62	22.57
11–20	23.76	23.78	23.76	24.12	24.11	24.06	22.44	22.43	22.40
21–31	23.52	23.52	23.51	22.74	22.72	22.71	22.55	22.62	22.62
Promedio.	23.57	23.58	23.57	23.40	23.40	23.37	22.53	22.56	22.53

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. X. 2.

FECHA	Abril			Mayo			Junio		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	23.2	23.2	23.2	17.3	17.2	17.2	14.3	14.3	14.2
2	23.3	23.3	23.2	17.0	17.0	16.9	14.1	14.1	14.0
3	23.1	22.9	22.7	16.8	16.8	16.8	14.0	14.0	14.0
4	22.4	22.1	21.8	16.8	16.8	16.8	14.0	14.0	14.0
5	21.5	21.4	21.2	16.8	16.8	16.7	14.0	14.0	14.0
6	21.0	20.9	20.8	16.6	16.5	16.3	13.9	13.8	13.8
7	20.7	20.6	20.4	16.1	16.0	15.8	13.7	13.7	13.7
8	20.3	20.3	20.2	15.6	15.6	15.4	13.7	13.8	13.8
9	20.1	20.0	19.9	15.3	15.3	15.2	13.9	14.0	14.0
10	19.9	20.0	19.9	15.1	15.1	15.0	14.1	14.1	14.2
11	19.8	19.7	19.6	15.0	15.0	14.9	14.3	14.4	14.5
12	19.4	19.3	19.2	14.8	14.8	14.8	14.6	14.8	14.8
13	19.1	19.0	18.8	14.7	14.8	14.7	14.8	14.7	14.6
14	18.8	18.8	18.7	14.7	14.7	14.7	14.5	14.4	14.3
15	18.7	18.8	18.8	14.7	14.7	14.8	14.2	14.2	14.1
16	18.8	18.9	18.9	14.7	14.8	14.8	14.1	14.0	14.0
17	18.9	18.9	18.8	14.7	14.7	14.7	14.0	13.9	13.8
18	18.7	18.6	18.5	14.7	14.6	14.6	13.9	14.0	13.9
19	18.5	18.5	18.5	14.5	14.5	14.5	14.0	14.0	14.0
20	18.6	18.7	18.7	14.4	*14.4*	14.5	14.1	14.1	14.1
21	18.8	18.8	18.9	14.5	14.5	14.6	14.1	14.1	14.1
22	19.0	19.1	19.2	14.5	*14.4*	14.6	14.0	14.0	13.8
23	19.2	19.2	19.1	14.6	14.7	14.7	13.6	13.5	13.4
24	19.1	19.1	19.1	14.8	14.8	14.8	13.4	13.3	13.2
25	19.0	18.9	18.8	14.8	14.8	14.8	13.2	13.2	13.2
26	18.7	18.7	18.6	14.7	14.7	14.7	13.2	13.2	13.2
27	18.6	18.5	18.5	14.7	14.7	14.8	13.2	13.2	13.2
28	18.4	18.3	18.2	14.8	14.8	14.8	13.1	13.1	13.1
29	18.0	17.8	17.7	14.7	14.7	14.6	13.0	13.0	13.0
30	17.5	17.4	*17.2*	14.6	14.6	14.5	12.9	12.8	*12.7*
31				14.4	14.4	*14.4*			
1–10	21.55	21.47	21.33	16.34	16.31	16.21	13.97	13.98	13.97
11–20	18.93	18.92	18.85	14.69	14.70	14.70	14.25	14.25	14.21
21–31	18.63	18.58	18.53	14.65	14.65	14.66	13.37	13.34	13.29
Promedio	19.70	19.66	19.57	15.21	15.20	15.17	13.86	13.86	13.82

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. X, 3.

FECHA	Julio			Agosto			Setiembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	12.5	12.3	12.2	*13.6*	13.8	14.0	15.8	15.7	15.6
2	11.9	11.8	11.6	14.2	14.4	14.5	15.5	15.4	15.3
3	11.4	11.3	11.2	14.7	14.8	14.9	15.1	15.1	15.0
4	11.0	10.9	10.8	15.0	15.1	15.2	15.0	*15.0*	15.0
5	10.6	10.5	10.4	15.3	15.5	15.6	15.0	15.1	15.1
6	10.3	10.3	10.3	15.8	15.8	15.9	15.2	15.4	15.4
7	*10.2*	10.2	10.3	16.0	16.0	16.0	15.5	15.6	15.6
8	10.4	10.6	10.7	16.1	16.0	16.0	15.7	15.7	15.7
9	11.0	11.2	11.4	15.8	15.7	15.6	15.7	15.7	15.7
10	11.7	11.8	11.9	15.6	15.6	15.6	15.8	15.8	15.8
11	11.9	11.8	11.6	15.6	15.6	15.6	15.9	16.0	16.0
12	11.5	11.3	11.1	15.6	15.6	15.6	16.0	16.1	16.1
13	10.9	10.7	10.6	15.6	15.7	15.8	16.2	16.3	16.3
14	10.4	10.3	10.2	15.9	16.0	16.0	16.4	16.4	16.5
15	10.2	*10.2*	*10.2*	16.2	16.2	16.2	16.5	16.5	16.5
16	10.2	10.2	10.3	16.1	16.0	16.0	16.5	16.5	16.5
17	10.4	10.4	10.5	16.0	16.1	16.2	16.4	16.4	16.3
18	10.6	10.8	10.9	16.2	16.4	16.4	16.3	16.4	16.4
19	11.0	11.1	11.2	16.6	16.6	16.7	16.4	16.4	16.3
20	11.2	11.2	11.3	16.8	16.8	16.9	16.3	16.3	16.2
21	11.3	11.4	11.6	17.0	17.1	17.2	16.2	16.2	16.2
22	11.8	11.9	12.0	17.3	17.4	17.4	16.3	16.4	16.4
23	12.2	12.2	12.3	17.4	17.4	17.4	16.6	16.6	16.8
24	12.3	12.3	12.3	17.2	17.2	17.0	16.8	16.9	16.8
25	12.3	12.3	12.3	17.0	16.9	16.8	16.8	16.9	16.8
26	12.3	12.3	12.3	16.9	16.9	16.9	16.9	17.0	17.0
27	12.4	12.4	12.5	17.0	17.0	17.0	17.2	17.2	17.2
28	12.5	12.5	12.5	16.9	16.8	16.8	17.4	17.5	17.6
29	12.6	12.7	12.7	16.7	16.6	16.6	17.7	17.9	18.0
30	12.9	13.0	13.1	16.5	16.4	16.2	18.2	18.4	18.6
31	13.2	13.4	13.4	16.1	16.0	15.9			
1–10	11.10	11.09	11.08	15.21	15.27	15.33	15.43	15.45	15.42
11–20	10.83	10.80	10.79	16.06	16.10	16.14	16.29	16.33	16.31
21–31	12.35	12.40	12.45	16.91	16.88	16.84	17.01	17.10	17.14
Promedio	11.45	11.46	11.47	16.09	16.11	16.13	16.24	16.29	16.29

TEMPERATURA DEL SUELO

(Á 66 CENTÍMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. X, 4.

FECHA	Octubre			Noviembre			Diciembre		
	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.	7 a.	2 p.	9 p.
1	18.8	19.1	19.3	18.6	18.6	18.4	19.6	19.6	19.5
2	19.6	19.8	19.9	18.4	18.3	18.2	19.4	19.4	19.4
3	20.2	20.4	20.6	18.1	*18.1*	18.1	19.1	*19.3*	*19.3*
4	20.7	20.8	20.8	18.2	18.3	18.4	19.4	19.4	19.6
5	20.8	20.6	20.3	18.4	18.4	18.4	19.7	19.8	19.8
6	19.9	19.6	19.2	18.4	18.4	18.4	20.0	20.0	20.0
7	18.9	18.7	18.5	18.5	18.5	18.6	20.0	20.0	20.0
8	18.4	18.3	18.2	18.6	18.7	18.7	20.0	20.0	20.1
9	18.2	18.2	18.2	18.6	18.6	18.6	20.2	20.2	20.2
10	18.3	18.4	18.5	18.6	18.6	18.6	20.2	20.0	20.0
11	18.6	18.7	18.8	18.6	18.6	18.6	19.8	19.7	19.6
12	18.8	18.9	18.9	18.5	18.5	18.6	19.6	19.6	19.7
13	18.8	18.8	18.7	18.7	18.8	18.8	19.8	20.0	20.2
14	18.6	18.6	18.5	19.0	19.1	19.2	20.6	20.8	21.0
15	18.5	18.4	18.4	19.2	19.2	19.3	21.2	21.4	21.4
16	18.5	18.6	18.6	19.4	19.4	19.5	21.6	21.6	21.9
17	18.8	18.8	19.0	19.6	19.6	19.6	22.0	22.0	22.1
18	19.0	19.0	18.9	19.7	19.7	19.8	22.2	22.2	22.3
19	18.8	18.7	18.7	19.9	20.0	20.0	22.3	22.2	22.4
20	18.6	18.6	18.6	20.0	20.0	20.1	22.4	22.4	22.6
21	18.7	18.8	18.8	20.1	20.1	20.1	22.7	22.8	23.0
22	18.9	19.0	19.0	20.1	20.1	20.0	23.0	23.0	23.0
23	18.9	18.8	18.7	20.0	20.0	19.9	22.9	22.8	22.8
24	18.6	18.5	18.4	20.0	20.0	19.0	22.7	22.8	22.8
25	18.2	18.1	18.0	20.1	20.2	20.1	22.9	23.0	23.0
26	17.8	17.8	17.7	20.1	20.0	19.9	22.9	22.8	22.8
27	17.6	*17.3*	17.6	19.7	19.6	19.4	22.6	22.5	22.4
28	17.6	17.7	17.8	19.4	19.4	19.3	22.2	22.1	22.0
29	17.9	18.2	18.2	19.4	19.4	19.4	21.8	21.8	21.6
30	18.4	18.3	18.6	19.4	19.5	19.6	21.6	21.6	21.6
31	18.6	18.6	18.9				21.6	21.6	21.6
1–10	19.38	19.39	19.35	18.44	18.45	18.44	19.79	19.77	19.79
11–20	18.70	18.71	18.71	19.26	19.29	19.35	21.15	21.19	21.32
21–31	18.29	18.28	18.31	19.83	19.83	19.67	22.45	22.44	22.42
Promedio	18.77	18.78	18.78	19.18	19.19	19.15	21.17	21.17	21.22

TEMPERATURA DEL SUELO

(Á 96 CENTIMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. XI, 1.

FECHA	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO
1	23.0	23.0	22.5	22.3	18.2	15.1
2	22.8	22.9	22.4	22.4	18.1	15.0
3	22.6	22.7	22.4	22.4	17.9	14.9
4	*22.5*	22.5	22.4	22.3	17.7	14.8
5	22.5	22.4	22.4	21.9	17.6	14.8
6	22.6	22.4	22.4	21.6	17.5	14.7
7	22.8	22.5	22.2	21.3	17.3	14.6
8	22.9	22.6	22.2	21.0	17.0	14.6
9	22.9	22.8	22.1	20.7	16.7	14.6
10	22.9	23.0	22.1	20.6	16.5	14.6
11	22.8	23.0	22.2	20.4	16.3	14.7
12	22.8	23.2	22.3	20.2	16.1	14.8
13	22.9	23.3	22.3	19.9	16.0	15.0
14	23.0	23.4	22.2	19.7	15.9	15.0
15	23.0	23.5	22.1	19.5	15.8	14.8
16	23.0	23.5	22.1	19.4	15.7	14.7
17	22.9	23.4	22.1	19.4	15.7	14.6
18	22.9	23.4	22.0	19.3	15.6	14.6
19	23.0	23.4	22.0	19.2	15.5	14.6
20	23.1	23.1	*21.8*	19.1	15.4	14.6
21	23.0	22.8	*21.8*	19.2	15.4	14.6
22	22.9	22.6	21.9	19.2	15.4	14.6
23	22.9	22.5	21.9	19.3	15.4	14.4
24	23.0	22.4	22.1	19.3	15.4	14.3
25	23.0	*22.3*	22.2	19.2	15.4	14.1
26	22.9	22.4	22.2	19.1	15.4	14.0
27	22.8	22.6	22.2	19.0	15.4	14.0
28	22.8	22.6	22.2	18.9	15.4	13.9
29	22.8		22.1	18.8	15.4	13.8
30	22.8		22.1	*18.5*	15.3	*13.7*
31	23.0		22.2		*15.2*	
1–10	22.75	22.68	22.31	21.65	17.45	14.77
11–20	22.94	23.32	22.11	19.61	15.80	14.74
21–31	22.90	22.52	22.08	19.05	15.37	14.14
Promedio	22.86	22.86	22.16	20.10	16.18	14.55

TEMPERATURA DEL SUELO

(Á 96 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. XI, 2.

FECHA	JULIO	AGOSTO	SE-TIEMBRE	OCTUBRE	NO-VIEMBRE	DI-CIEMBRE
1	13.6	*13.4*	16.2	*17.6*	18.4	19.3
2	13.3	13.6	16.0	18.0	18.2	19.2
3	13.0	14.0	15.8	18.4	*18.1*	*19.2*
4	12.6	14.3	15.6	18.9	*18.1*	*19.2*
5	12.4	14.5	*15.5*	19.2	18.2	19.2
6	12.1	14.8	*15.5*	19.1	18.2	19.4
7	11.9	15.1	15 6	18.8	18.2	19.4
8	11.8	15.3	15.6	18.4	18.2	19.5
9	11.9	15.3	15.7	18.2	18.4	19.6
10	12.2	15.3	15.7	18.2	18.4	19.6
11	12.4	15.3	15.8	18.2	18.4	19.6
12	12.4	15.3	15.9	18.3	18.4	19.5
13	12.2	15.4	16.0	18.4	18.4	19.5
14	11.9	15.5	16.1	18.4	18.5	19.7
15	11.7	15.6	16.2	18.3	18.6	20.0
16	11.6	15.7	16.2	18.2	18.8	29.3
17	*11.5*	15.7	16.3	18.3	18.9	29.6
18	11.6	15.8	16.3	18.4	19.0	20.8
19	11.7	16.0	16.2	18.4	19.2	21.0
20	11.8	16.1	16.2	18.4	19.2	21.2
21	11.9	16.3	16.2	18.4	19.4	21.4
22	12.1	16.5	16.2	18.4	19.4	21.6
23	12.3	16.6	16.3	18.5	19.4	21.6
24	12.4	16.7	16.5	18.4	19.4	21.6
25	12.6	16.7	16.6	18.3	19.5	21.8
26	12.6	16.6	16.6	18.1	19.6	21.8
27	12.7	16.6	16.8	17.8	19.5	21.8
28	12.8	16.6	16.9	18.0	19.4	21.7
29	12.8	16.6	17.0	17.8	19.2	21.5
30	12.9	16.5	17.3	18.0	19.2	21.4
31	13.1	16.4		18.2		21.6
1–10	12.48	14.56	15.72	18.48	18.24	19.36
11–20	11.88	15.61	16.12	18.33	18.74	20.22
21–31	12.56	16.55	16.64	18.17	19.40	21.62
Promedio	12.32	15.62	16.16	18.32	18.79	20.44

TEMPERATURA DEL SUELO

(Á 126 CENTIMETROS DE PROFUNDIDAD)

CÓRDOBA, 1887

Tab. XII, 1.

FECHA	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO
1	22.3	22.4	22.1	21.8	18.7	15.8
2	22.3	22.4	22.1	21.9	18.7	15.7
3	22.2	22.3	22.1	21.9	18.5	15.6
4	22.1	22.2	22.1	21.9	18.4	15.5
5	*22.0*	22.1	22.0	21.8	18.3	15.5
6	*22.0*	22.1	22.0	21.7	18.2	15.4
7	22.1	*22.0*	22.0	21.4	18.0	15.3
8	22.2	22.1	21.9	21.5	17.9	15.3
9	22.2	22.1	21.9	21.1	17.7	15.2
10	22.2	22.2	21.8	20.8	17.4	15.2
11	22.2	22.3	21.9	20.7	17.3	15.2
12	22.1	22.4	21.9	20.6	17.2	15.2
13	22.2	22.5	21.9	20.4	16.9	15.3
14	22.3	22.6	21.9	20.4	16.8	15.3
15	22.3	22.7	21.7	20.1	16.7	15.3
16	22.3	22.7	21.8	19.8	16.6	15.2
17	22.3	22.7	21.8	19.8	16.5	15.2
18	22.3	22.8	21.8	19.7	16.4	15.1
19	22.3	22.7	21.7	19.6	16.6	15.1
20	22.4	22.7	21.7	19.5	16.5	15.1
21	22.4	22.6	21.6	19.5	16.3	15.1
22	22.4	22.4	*21.6*	19.4	16.1	15.0
23	22.3	22.3	*21.6*	19.4	16.1	15.0
24	22.3	22.2	21.6	19.4	16.0	14.9
25	22.4	22.1	21.7	19.4	16.0	14.8
26	22.4	22.1	21.8	19.4	15.9	14.7
27	22.3	22.1	21.8	19.3	15.9	14.6
28	22.3	22.1	21.8	19.3	15.9	14.6
29	22.2		21.8	19.2	15.9	14.5
30	22.2		21.7	*19.0*	15.9	*14.4*
31	22.3		21.8		*15.8*	
1–10	22.16	22.19	22.00	21.58	18.18	15.45
11–20	22.27	22.61	21.81	20.06	16.75	15.20
21–31	22.32	22.24	21.71	19.33	15.98	14.76
Promedio	22.25	22.35	21.84	20.32	16.94	15.14

TEMPERATURA DEL SUELO

(Á 126 CENTÍMETROS DE PROFUNDIDAD)

CORDOBA, 1887

Tab. XII, 2.

FECHA	JULIO	AGOSTO	SETIEMBRE	OCTUBRE	NOVIEMBRE	DICIEMBRE
1	14.3	13.4	16.2	16.9	18.0	19.0
2	14.2	13.5	16.1	17.1	18.0	19 0
3	14.0	13.7	16.0	17.4	18.0	19.0
4	13.8	13.9	15.9	17.7	18.0	18.9
5	13.6	14.1	15.8	18.0	18.0	19.0
6	13.4	14.3	15.7	18.2	18.0	19.0
7	13.2	14.6	15.7	18.2	18.0	19.1
8	13.0	14.8	15.7	18.1	18.0	19.1
9	12.9	14.9	15.7	18.0	18.1	19.2
10	12.8	15.0	15.7	17.9	18.1	19.2
11	13.0	15.0	15.7	17.7	18.1	19.3
12	13.0	15.1	15.8	17.9	18.1	19.3
13	13.0	15.1	15.8	17.9	18.2	19.3
14	12.9	15.2	15.9	18.0	18.2	19.3
15	12 7	15.3	16.0	17.9	18.3	19.4
16	12.6	15.4	16.1	18.0	18.3	19.6
17	12.5	15.4	16.1	18.0	18.4	19.7
18	12.4	15.5	16.1	18.0	18.5	19.8
19	12.4	15.6	16.1	18.0	18.6	20.1
20	12.5	15.7	16.2	18.1	18.7	20.3
21	12.5	15.8	16.2	18.0	18.8	20.4
22	12.6	15.9	16.2	18.1	18.9	20.6
23	12.6	16.1	16.2	18.1	19.0	20.7
24	12.7	16.2	16.3	18.1	19.0	20.8
25	12.9	16.3	16.3	18.1	19.0	20.8
26	12.9	16.3	16.4	18.0	19.1	21.0
27	13.0	16.3	16.4	17.9	19.1	21.1
28	13.0	16.3	16.5	17.9	19.1	21.1
29	13.1	16.4	16.6	17.8	19.0	21.0
30	13.2	16.4	16.7	17.8	19.0	20.9
31	13.3	16.3		17.9		20.9
1–10	13.52	14.22	15.85	17.75	18.02	19.05
11–20	12.70	15.33	15.98	17.95	18.34	19.61
21-31	12.89	16.21	16.38	17.97	19.00	20.85
Promedio	13.03	15.28	16.07	17.89	18.45	19.87

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1887

$\lambda = + 4^h 16^m 18^s 2$ Greenw. ; $\varphi = - 31° 24' 15''$; $H = 406^m$; $h_t = 2.3^m$; $h_r = 1.5^m$

Tab. XIII, 1

MESES	PRESION ATMOSFÉRICA 700 mm. +						TEMPERATURA DEL AIRE									
	7 a.	2 p.	9 p.	PROM.	MAX.	MIN.	7 a.	2 p.	9 p.	PROM.	MEDIAS Máx.	MEDIAS Mín.	MAX. Absol.	FECHA	MIN. Absol.	FECHA
Enero	25.91	23.89	24.58	*24.79*	31.7	17.1	19.68	28.42	21.63	23.24	30.61	15.81	35.7	23	5.2	2
Febrero....	27.14	25.40	26.64	26.39	33.5	19.2	17.45	29.61	20.24	22.43	30.55	14.16	38.3	10	7.6	21
Marzo	27.64	25.48	27.29	26.80	31.3	19.4	14.95	28.67	19.20	20.94	29.53	12.65	35.8	28	6.5	27
Abril......	28.24	26.70	28.45	27.80	34.4	15.7	10.58	22.82	13.99	15.80	23.86	8.83	31.8	1	—1.4	28
Mayo......	30.89	29.36	30.91	30.39	38.2	21.8	4.19	21.22	9.60	11.67	22.21	*2.88*	28.4	2	—3.4	6
Junio......	26.06	24.41	26.31	25.59	37.0	16.8	6.05	20.33	9.62	12.00	20.92	4.64	27.7	3	—3.4	22
Julio	32.25	30.47	32.01	31.58	41.2	19.5	4.90	17.10	9.21	*10.40*	17.52	3.77	29.4	31	*—6.3*	4
Agosto	25.41	23.10	25.44	24.65	36.8	15.3	9.83	22.62	14.19	15.55	23.35	8.52	35.3	20	1.3	8
Setiembre..	28.85	26.39	28.39	27.88	35.1	19.3	8.46	22.22	13.59	14.76	22.75	6.14	35.4	30	0.1	16
Octubre....	28.74	26.53	28.55	27.94	40.4	*13.4*	13.26	23.18	16.31	17.58	23.90	10.14	36.7	2	1.2	6
Noviembre.	27.23	25.01	25.99	26.08	31.6	18.1	16.27	24.50	18.04	19.60	26.15	12.47	31.6	16.18	6.9	14
Diciembre..	25.84	23.98	24.69	24.83	32.5	15.7	19.05	26.26	20.45	21.92	27.42	15.13	36.5	13	7.6	12
Año	27.85	25.89	27.44	27.06	41.2	13.4	12.06	23.91	15.51	17.16	21.90	9.60	38.3	10. II.	—6.3	4. VII.

RESUMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1887

Tab. XIII, 2.

MESES	TERMÓMETRO HÚMEDO	HUMEDAD ABSOLUTA (mm.)				HUMEDAD RELATIVA				EVAPORACION (mm.)							
										LIBRE				Á LA SOMBRA			
	Cent.	7 a.	2 p.	9 p.	PROM.	7 a.	2p.	9p.	Prom.	7 a.	2 p.	9 p.	SUMA	7 a.	2 p.	9 p.	SUMA
Enero.	18.71°	13.37	13.30	13.97	13.55	77.3	49.1	72.4	66.3	8.6	122.9	74.6	206.1	8.0	38.1	32.1	78.2
Febrº..	17.47	11.98	11.64	12.73	12.12	79.8	38.3	71.7	63.3	8.0	122.7	90.1	220.8	6.7	34.4	31.9	73.0
Marzo.	16.47	10.90	12.02	11.60	11.51	85.5	42.4	70.1	66.0	7.8	113.9	74.0	195.7	7.9	36.0	32.2	76.1
Abril..	12.46	8.47	9.70	9.24	9.14	86.9	47.7	75.7	70.1	8.7	72.2	36.1	117.0	7.3	26.1	23.3	56.7
Mayo..	7.77	5.28	6.28	6.17	*5.91*	85.2	34.6	68.8	62.9	7.0	81.3	47.9	136.2	6.5	30.6	28.6	65.7
Junio.	8.46	6.01	7.17	6.51	6.56	82.9	41.2	70.9	65.0	9.8	74.4	45.3	129.5	8.5	29.7	28.3	66.5
Julio..	*7.69*	6.26	7.00	7.11	6.79	89.5	47.4	77.1	71.3	9.5	64.3	48.6	122.4	8.1	25.6	24.4	58.1
Agosto	11.29	7.32	8.07	8.17	7.85	99.5	39.4	65.2	61.4	18.2	118.5	69.1	205.8	15.7	42.0	41.1	98.8
Setre..	10.16	6.54	6.89	6.96	6.80	77.9	36.4	60.6	*58.3*	18.1	125.6	94.2	237.9	15.9	49.2	54.7	119.8
Octre..	13.00	8.61	8.51	8.92	8.68	74.6	42.5	64.7	60.6	19.6	135.2	90.8	245.6	17.8	52.1	51.6	121.5
Novre..	15.51	10.31	11.09	10.99	10.81	75.4	51.2	71.6	66.0	9.6	119.1	72.3	201.0	8.8	40.8	35.6	85.2
Dicre..	17.72	12.48	13.11	12.77	12.79	75.3	53.3	71.9	66.8	18.7	137.4	100.0	256.1	16.2	41.6	43.7	101.5
Año...	13.06	8.96	9.56	9.59	9.37	80.8	43.9	70.1	64.8	143.6	1287.5	843.0	2274.1	127.4	449.2	427.5	1004.4

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1887

Tab. XIII, 3

MESES	TEMPERATURAS DEL SUELO														
	SUPERFICIE INTERNA											A 7.5 CENT. DE PROFUND.			
	7 a.	2 p.	9 p.	PROM.	MEDIAS Máx.	MEDIAS Mín.	ABSOLUTAS Max.	Fecha	Mín.	Fecha	7 a.	2 p.	9 p.	PROM.
Enero	21.17	34.64	21.83	25.85	43.26	17.78	58.8	4	10.1	2	21.67	28.11	24.50	24.76
Febrero	18.72	40.43	20.93	26.69	45.82	16.60	57.2	6	11.0	2	20.43	27.30	24.05	23.93
Marzo	17.10	35.02	19.97	24.03	44.13	15.29	56.3	28	10.6	27	19.45	26.53	23.19	23.07
Abril	12.41	22.49	14.59	16.50	31.16	11.43	46.4	1	2.9	28	14.80	19.15	16.93	16.96
Mayo	5.47	21.88	8.74	12.03	28.90	4.36	38.3	12	—0.5	6	10.48	14.23	13.35	12.69
Junio	5.68	21.81	8.50	12.00	26.72	4.97	32.6	24.25	—1.8	22	9.75	13.66	12.40	11.91
Julio	4.45	20.20	7.89	*10.85*	24.32	3.66	35.4	29	—*4.8*	2	8.37	11.92	11.16	*10.48*
Agosto	10.32	29.31	13.45	17.70	36.99	8.61	48.4	20	3.1	8	14.71	19.12	17.79	17.21
Setiembre	9.77	30.43	13.62	17.94	37.95	7.25	52.1	30	1.6	2	14.18	19.58	18.02	17.26
Octubre	14.31	29.81	16.23	20.12	35.20	11.81	56.5	30	3.8	6	16.39	21.07	19.18	18.88
Noviembre	16.95	29.07	18.02	21.35	31.95	14.13	46.8	13	11.1	14	17.37	21.82	19.19	19.73
Diciembre	21.50	31.42	20.48	24.47	41.05	16.75	*63.7*	13	9.9	12	20.07	24.98	22.39	22.48
Año	13.16	28.87	15.35	19.13	36.12	11.06	63.7	13. XII.	—1.8	2. VII.	15.61	20.62	18.58	18.28

RESÚMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1887

Tab. XIII, 4.

MESES	TEMPERATURAS DEL SUELO													
	A 15 CENT. DE PROFUND.				A 36 CENT. DE PROFUND.				A 66 CENT. DE PROFUND.				Á 96 CENT. de PROFUNDID.	Á 126 CENT. de PROFUNDID.
	7 a.	2 p.	9 p.	PROM.	7 a.	2 p.	9 p.	PROM.	7 a.	2 p.	9 p.	PROM.	2 p.	2 p.
Enero	22.95	25.14	25.06	24.38	24.37	24.09	24.25	24.24	23.57	23.58	23.57	23.57	22.86	22.25
Febrero	22.14	23.94	24.58	23.55	23.96	23.65	23.74	23.78	23.40	23.40	23.37	23.39	22.86	22.35
Marzo	21.23	23.50	23.61	22.78	22.98	22.74	22.85	22.81	22.53	22.56	22.53	22.51	23.16	21.84
Abril	16.62	17.89	17.90	17.47	19.14	18.88	18.86	18.96	19.70	19.66	19.57	19.64	20.10	20.32
Mayo	12.30	12.92	13.77	13.00	14.37	14.17	14.17	14.24	15.21	15.20	15.17	15.19	16.18	16.94
Junio	11.76	12.35	13.15	12.42	13.36	13.19	13.17	13.24	13.86	13.86	13.82	13.85	14.55	15.14
Julio	9.76	10.27	11.25	*10.43*	10.96	10.85	10.91	*10.91*	11.45	11.46	11.47	*11.46*	*12.32*	*15.03*
Agosto	16.18	16.82	17.87	16.96	16.91	16.72	16.75	16.79	16.09	16.11	16.13	16.11	15.62	15.28
Setiembre	15.85	16.89	17.88	16.87	16.80	16.62	16.71	16.72	16.24	16.29	16.29	16.27	16.16	16.07
Octubre	17.84	19.27	19.47	18.86	19.54	19.31	19.35	16.40	18.77	18.78	18.78	18.78	18.32	17.89
Noviembre	18.44	20.15	20.45	19.68	19.55	19.72	19.78	19.68	19.18	19.19	19.15	19.17	18.79	18.45
Diciembre	20.87	23.06	22.80	22.24	22.14	22.01	22.05	22.07	21.17	21.17	21.22	21.19	20.44	19.87
Año	17.16	18.52	18.98	18.22	18.67	18.50	18.55	18.57	18.43	18.44	18.42	18.43	18.36	18.29

RESUMEN DE LAS OBSERVACIONES HECHAS EN CÓRDOBA

DURANTE EL AÑO 1887

Tab. XIII, 5.

MESES	NEBULOSIDAD EN LA ESCALA DE 10				PRECIPITACION				LLUVIA en el momento de la observacion	NÚMERO DE LOS DIAS CON						DIAS	
	7 a.	2p.	9p.	PROM.	MM.	%	MÁX. (mm.)	FECHA		LLUVIA	NIEVE	GRANIZO	TRUENOS y relámpagos	RELAMPAGOS	NEBLINA	CLAROS	NUBLADOS
Enero	4.0	4.5	3.5	4.0	103.6	18.3	23.5	24	6	13	—	—	11	1	—	11	4
Febrero	2.6	2.6	2.1	2.5	53.9	9.5	31.0	13	3	5	—	—	5	—	—	16	1
Marzo	4.2	3.6	3.2	3.7	36.6	6.5	12.1	16	2	7	—	—	3	2	—	11	2
Abril.......	3.3	4.1	3.3	3.6	75.7	13.4	32.9	1	2	5	—	1	4	—	—	12	2
Mayo	3.0	3.1	1.1	2.4	10.2	1.8	10.2	27	—	1	—	—	—	—	—	20	2
Junio.......	5.3	4.1	3.6	4.4	0.0	0.0	—	—	—	—	—	—	—	—	—	8	4
Julio	5.7	4.5	4.5	4.9	9.5	1.7	6.4	22	2	4	1	—	—	—	—	9	8
Agosto......	6.9	3.9	3.9	4.9	0.3	0.0	0.3	31	1	1	—	—	—	—	—	3	5
Setiembre...	4.2	3.3	2.6	3.4	3.2	0.6	1.8	6	2	4	—	—	1	1	—	13	4
Octubre.....	4.0	4.7	4.0	4.2	49.1	8.7	23.0	21	5	8	—	1	4	—	—	11	5
Noviembre ..	4.2	4.3	3.9	4.1	130.4	23.1	47.4	18	5	14	—	2	10	1	—	12	6
Diciembre...	5.1	4.6	3.6	4.4	92.6	16.4	28.1	2	6	8	—	—	8	3	—	8	5
Año........	4.4	3.9	3.3	3.9	565.1	100	47.4	18.XI	31	70	1	4	46	8	—	131	48

RESUMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1887

DISTRIBUCION DE LOS VIENTOS

Tab. XIII, 6.

MESES	7 a. m.										2 p. m.									
	N	NE	E	SE	S	SW	W	NW	Calma	Suma	N	NE	E	SE	S	SW	W	NW	Calma	Suma
Enero	—	8	—	1	4	1	—	1	16	31	1	13	3	4	2	1	—	2	5	31
Febrero	2	1	—	—	5	1	—	—	19	28	1	12	5	5	5	—	—	—	0	28
Marzo.......	—	2	—	2	1	1	—	—	25	31	1	16	5	7	—	—	1	1	0	31
Abril	—	2	—	3	1	1	—	—	23	30	2	8	7	3	6	—	1	1	2	30
Mayo	—	—	1	—	2	—	—	—	28	31	2	14	2	4	3	—	—	1	5	31
Junio	1	1	1	—	5	1	—	—	21	30	—	11	3	6	8	1	—	—	1	30
Julio	1	4	1	—	4	1	—	—	20	31	4	11	5	3	3	1	—	1	0	31
Agosto......	—	3	1	1	8	1	—	—	17	31	1	8	4	10	5	1	1	—	0	31
Setiembre...	—	3	2	1	3	—	—	—	21	30	2	13	5	5	4	—	—	1	0	30
Octubre	1	7	2	2	9	—	—	—	10	31	—	15	1	9	5	—	—	—	1	31
Noviembre...	1	5	3	—	6	2	—	—	13	30	—	13	4	5	4	—	—	1	3	30
Diciembre...	2	5	2	4	11	2	—	—	5	31	3	10	7	6	4	—	—	1	0	31
Año	8	41	13	14	59	11	—	1	218	365	18	147	51	67	49	4	3	9	17	365

RESUMEN DE LAS OBSERVACIONES HECHAS EN CORDOBA

DURANTE EL AÑO 1887

DISTRIBUCION DE LOS VIENTOS

Tab. XIII, 7.

MESES	9 p.m.										DIA									
	N	NE	E	SE	S	SW	W	NW	Calma	Suma	N	NE	E	SE	S	SW	W	NW	Calma	Suma
Enero	—	4	—	—	1	1	—	1	24	31	1	25	3	5	7	3	—	4	45	93
Febrero	—	—	—	—	4	—	—	—	24	28	3	13	5	5	14	1	—	—	43	84
Marzo	1	1	—	2	4	—	—	—	23	31	2	19	5	11	5	1	1	1	48	93
Abril	2	—	2	—	3	—	—	1	22	30	4	10	9	6	10	1	1	2	47	90
Mayo	—	2	—	—	2	1	—	—	26	31	2	16	3	4	7	1	—	1	59	93
Junio	—	2	1	1	7	—	—	—	19	30	1	14	5	7	20	2	—	—	41	90
Julio	2	7	—	1	5	1	—	—	15	31	7	25	6	4	12	3	—	1	35	93
Agosto	3	1	1	—	9	—	—	—	17	31	5	12	6	11	22	2	1	—	34	93
Setiembre ...	2	4	—	1	4	—	—	—	19	30	4	20	7	7	11	—	—	1	40	90
Octubre	1	6	—	—	4	—	—	—	20	31	2	28	3	11	18	—	—	—	31	93
Noviembre ..	—	4	—	—	2	—	—	—	24	30	1	22	7	5	12	2	—	1	40	90
Diciembre ...	1	2	—	2	4	—	—	—	22	31	6	17	9	12	19	2	—	1	27	93
Año	12	33	4	7	49	3	—	2	255	365	38	221	68	88	157	18	3	12	190	1095

TEMPERATURA DEL SUELO

CORDOBA, 1888

Enero

Anexo 1.

FECHA	SUPERFICIE INTERNA			A LA PROFUNDIDAD DE					
	2 pm	M	m	7.5 cm. 2 p.	15 cm. 2 p.	36 cm. 2 p.	66 cm. 2 p.	96 cm. 2 p.	126 cm. 2 p.
1	41.0	53.7	16.2	29.6	26.3	22.7	21.8	21.2	20.8
2	45.0	49.2	19.5	27.8	25.2	23.6	22.2	21.3	20.9
3	45.3	60.9	17.6	30.8	27.7	23.7	22.4	21.5	20.8
4	47.8	58.2	19.5	31.2	28.3	24.7	22.8	21.6	20.9
5	47.5	56.3	21.7	31.7	28.7	25.2	23.2	21.8	21.0
6	50.7	61.2	22.4	33.6	30.3	25.9	23.6	22.1	21.2
7	54.5	66.2	22.6	34.2	30.7	26.6	24.2	22.4	21.3
8	31.5	41.2	15.7	31.7	26.1	26.6	24.6	22.7	21.5
9	37.2	53.2	12.4	28.1	25.5	25.0	24.5	23.0	21.8
10	41.7	54.7	7.4	28.4	25.3	24.2	24.0	23.0	21.9
11	47.0	60.7	15.0	30.0	26.7	24.1	23.7	22.9	22.0
12	50.8	67.7	15.8	31.7	28.2	24.7	23.7	22.8	22.0
13	51.5	67.0	18.5	33.0	29.3	25.5	23.9	22.8	22.1
14	51.8	64.0	21.9	33.6	30.3	26.3	24.3	23.0	22.1
15	52.9	67.0	20.4	32.9	29.8	26.7	24.8	23.2	22.2
16	53.7	65 0	21.1	34.0	30.6	27.1	25.1	23.4	22.3
17	57.3	65.9	20.8	34.8	31.1	27.7	25.5	23.7	22.5
18	55.0	61.2	22.2	34.8	32.7	28.2	25.9	24.0	22.7
19	55.3	61.5	21.2	36.1	33.1	28.5	26.3	24.3	22.9
20	57.7	63.5	21.6	35.1	34.1	29.0	26.6	24.5	23.1
21	55.8	61.0	23.3	37.2	35.8	29.3	26.9	24.8	23.3
22	57.5	68.4	23.0	37.1	35.8	29.8	27.2	25.1	23 6
23	33.0	33.4	22.2	29.4	29.4	30.0	27.6	25.4	23.8
24	34.5	41.2	19.7	29.3	28.9	28.9	27.6	25.6	24.0
25	50.5	61.0	13.2	34.2	28.9	28.1	27.3	25.7	24.2
26	39.6	48.9	19.0	33.6	29.1	28.3	27.0	25.6	24.3
27	47.2	61.7	19.5	33.1	27.9	27.7	27.0	25.6	24.3
28	47.3	50.9	19.1	35.3	28.7	27.6	26.7	25.6	24.4
29	41.0	44.4	21.5	33.1	28.8	28.0	26.8	25.5	24.4
30	46.8	54.3	14.2	34.5	27.6	27.7	26.8	25.5	24.4
31	54.3	68.3	15.2	35.9	28.3	27.7	26.8	25.6	24.5
1–10	44.2	55.5	17.5	29.71	27.41	24.80	23.33	22.06	21.21
11–20	53.3	64.3	19.9	33.60	30.59	26.79	24.98	23.46	22.39
21–31	46.2	54.2	18.8	33.88	29.93	28.46	27.06	45.25	24.11
Promedio.	47.81	57.90	18.72	32.45	23.33	26.74	25.19	23.72	22.62

TEMPERATURA DEL SUELO

CÓRDOBA, 1888

Febrero

Anexo 2.

FECHA	SUPERFICIE INTERNA			A LA PROFUNDIDAD DE					
	2 pm	M	m	7.5 cm. 2 p.	15 cm. 2 p.	36 cm. 2 p.	66 cm. 2 p.	96 cm. 2 p.	126 cm. 2 p.
1	44.5	58.9	16.5	31.6	27.4	27.9	26.8	**25.6**	24.5
2	17.8	57.0	11.7	32.0	26.2	27.2	26.7	25.6	24.5
3	51.3	63.1	10.9	32.7	26.2	26.7	26.4	25.5	24.5
4	51.8	62.0	12.6	34.3	27.0	26.7	26.4	25.5	24.5
5	**54.2**	64.9	13.5	**37.1**	28.2	27.0	26.2	25.4	24.5
6	52.5	**65.8**	17.0	**37.1**	29.4	27.6	26.4	25.4	24.5
7	39.3	60.0	19.5	34.3	**29.6**	**28.2**	26.6	25.4	24.5
8	30.2	32.2	17.3	25.8	26.1	28.1	**26.9**	25.6	24.6
9	48.4	52.4	14.3	31.0	25.3	26.7	26.7	**25.6**	24.6
10	23.4	*25.5*	20.3	22.7	24.3	26.6	26.3	25.6	**24.6**
11	27.9	31.8	17.7	25.9	23.8	25.6	26.0	25.4	24.6
12	23.1	26.8	18.7	**21.7**	22.6	25.1	25.7	25.2	24.6
13	32.9	36.3	17.0	26.3	23.5	24.3	25.1	25.0	24.4
14	40.1	42.5	15.9	27.6	24.2	24.3	24.7	24.7	24.3
15	37.2	40.5	15.5	27.1	24.1	24.3	24.6	24.5	24.2
16	35.0	40.6	18.4	25.9	24.3	24.6	24.5	24.4	24.1
17	23.9	26.8	17.4	22.1	22.7	24.5	24.5	24.3	23.9
18	33.0	38.6	17.3	26.2	24.2	24.0	24.4	24.2	23.8
19	25.2	26.2	19.4	23.8	23.3	24.2	24.2	24.1	23.8
20	24.2	33.1	17.8	23.8	23.3	23.8	24.1	24.0	23.7
21	34.5	35.4	16.8	26.2	23.2	23.3	23.9	23.8	23.6
22	31.2	36.7	17.1	24.6	22.9	23.5	23.7	23.7	23.5
23	33.6	39 2	11.3	24.9	21.7	22.9	23.6	23.6	23.4
24	36.1	42.6	*10.5*	25.2	*21.6*	*22.6*	23.3	23.5	23.3
25	*14.3*	49.4	13.5	29.5	23.7	*22.6*	*23.1*	23.3	23.2
26	44.0	53.4	15.5	30.7	25.3	23.4	23.2	*23.2*	23.1
27	41.1	51.8	16.0	31.6	26.4	24.4	23.5	*23.3*	*23.0*
28	42.5	52.6	15.5	31.4	26.9	25.2	24.0	23.3	*23.0*
29	38.4	57.0	14.5	31.1	27.1	25.8	24.4	23.6	23.1
1–10	41.3	54.2	15.4	31.86	26.97	27.27	26.54	25.52	24.53
11–20	30.3	31.3	17.5	25.13	23.60	24.47	24.78	24.58	24.14
21–29	35.1	46.3	14.5	28.36	24.31	23.74	23.63	23.47	23.24
Promedio	36.61	44.90	15.84	28.45	24 98	25.21	25.03	24.56	23.97

BOLETIN

DE LA

ACADEMIA NACIONAL DE CIENCIAS

EN

CÓRDOBA

(República Argentina)

Julio de 1889. — Tomo XI. — Entrega 4ª

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Academia Nacional de Ciencias

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1889



ACADEMIA NACIONAL DE CIENCIAS

DE LA

REPÚBLICA ARGENTINA (EN CÓRDOBA)

AGENTES DE LA ACADEMIA NACIONAL DE CIENCIAS

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FUNGI PUIGGARIANI

AUCTORE

CAROLO SPEGAZZINI

(Italo)

Pugillus I

PRAEMONITUM

Apiahy, provinciae Sancti Paoli Brasiliae meridionalis, oppidulum est jucundissimum, collibus uberrimis montibusque sylvosis circumcinctum, aëre purissimo, cielo, altitudinis caussa, modice calido atque parce humido donatum.

Fungi, quos nunc (vix nonnullis anno 1881 in quarto Argentinorum fungorum pugillo editis) publici juris facio, ex ejusdem regione, nec non e finitimis *Iporanga Xiririca* et *Iguapé*, omnes provenientes, a praeclaro medicinae Doctore Johanne Puiggari, Barcinensi, ob suas fanerogamarum cryptogamarumque pulcherrimas collectiones notissimo, lecti fuerunt; et ego strenuissimo scientiae Vexillario sedulissimoque naturae Inquisitori palam gratias quam maximas ago.

Opellum, quod hoc tempore Collegis offero, species saepius difficillimas permultas novas v. criticas sistens, admodun im-

perfectum est, sed certissimus fere sum omnes illud humanissime accipient.

Carolus Spegazzini.

La Plata, 1 Jan. 1889.

HYMENOMYCETEAE Fr.

AGARICINEAE Fr.

1. Lepiota bonaerensis Speg. — Fung. arg. pug. II, n. 1.
Hab. In pratis humosis prope *Apiahy*, Jun. 1881 (sub n. 1529 B).
Obs. Specimina brasiliensa siccitate nonnihil obliterata sed a typo vix recedentia tenacitate majore fere marasmiacea; an *L. pardinae* (Mntgn.) Sacc. identica? Sporae ovoideo-ellipticae utrinque obtusae (13-15 × 9-10 μ), granuloso-farctae, hyalinae.

2. Lepiota imperialis Speg. (n. sp.)
Diag. Solitaria, coriacella; pileus conoideo-umbonatus, e cinerascenti cervinus, umbone obscuriore, squamulis maculiformibus minutis confertiusculis fuscis dense variegatus; lamellae albo-subcinerascentes; stipes rectus pileo concolor, glaber, teres basi non v. vix incrassatus, anulo supero candido membranaceo amplo mobili ornatus; sporae ovoideae, hyalinae.
Hab. In campis sylvaticis prope *Apiahy*, Apr. 1888 (sine n.).
Obs. Procerus (10'' alt.); pileus primo conico-ovoideus, dein sub hemisphaerico-expansus. (4-5'' dm.), centro majuscule umbonatus, pallide sordideque e cinereo cervinus, minute adpresseque araneoso-pruinulosus, umbone laevi glabro e testaceo fuscescente, squamulis minutis

triangulari-sublinearibus adpressis fusco-testaceis, marginem versus parcissimis, densiuscule vestitus; caro alba subexsucca tenuis vix centro incrassatula; lamellae densae, lanceolatae, antice obtusae, postice longiuscule attenuato-acutatae (25''' lg. × 2, 5''' lt.), subcollariatae, a stipite remotae membranaceo-subcrassiusculae, acie integerrimae, in vivo albo-pallescentes, in sicco e pallescenti subcinerascentes; stipes erectus rectus teres (4-5''' crs.) fistulosus laevis glaber, in juventute albo-pallescens, per aetatem sordide obscureque cinerascens, basi non v. vix incrassatus, ad tertium superum anulo mobili amplo (5-6''' lt.) membranaceo candido integro crenulato ornatus, ima basi mycelio laxe albo-araneoso terram quisquiliaque involvente radicatus; sporae ovatae sursum obtusae postice lateraliter apiculatae (12 × 6 μ), grosse 1-guttulatae, hyalinae. Species pulcherrima distinctissima mox dignoscenda!

3. Lepiota oedipus Speg. (n. sp.)

Diag. Solitarius, magnus; pileus hemisphaerico-campanulatus, cervinus, dense, umbone excepto, radiatim ac subreticulatim albo-rimulosus; lamellae albae; stipes rectus, fistulosus, pileo concolor, dense longitudinaliter striatulus, pruinuloso-pulverulentus, basi abrupte grosseque bulboso-incrassatus ac pallescens, anulo supero mobili carnoso-submembranaceo magno albo ornatus; sporae ovoideae, laeves, hyalinae.

Hab. Vulgatus in campis post pluvias prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Procerus (25-26'' alt.); pileus primo ovatus, dein hemisphaerico-explanatus (8-10'' dm.), majuscule obtuseque umbonatus, pallide cervinus, glaber, dense minuteque, umbone excepto, radiatim albo-rimulosus, rimulis aliis transversis strictioribus saepe reticulato-junctis, margine obtusus integer; caro alba subexsucca tenuiuscula

vix in umbone incrassata; lamellae confertae, tenuissime membranaceae, lanceolatae, antice obtusae postice longe attenuato-acutatae (40-50''' lg. × 5-7''' lt.), acie integerrimae, subcollariatae, a stipite remotiusculae, albae; stipes erectus, rectus, teres (10''' crs.) late fistulosus, ad partem superam pruinuloso-pulverulentus, pileo concolor v. vix pallidior atque dense minuteque longitudinaliter striatus, deorsum glabratus pallescens basique abrupte majusculeque bulboso-incrassatus (20-30''' crs.); anulus superus, mobilis, amplus, membranaceo-subcarnosus, albus, primo integer, dein lacerus saepeque pilei margine frustulatim adhaerens; sporae ovatae leniter inaequilaterales, antice obtusae, basi apiculatae, grosse 1-guttulatae, in vivo hyalinae, in sicco pallidissime subfulvescentes (16 × 7-8 μ).

4. Armillaria mellea Vahl. = Sacc., Syll. hym. I, p. 80.

Hab. Ad truncos subputrescentes in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1539).

Obs. Specimina nonnihil senescentia ac obliterata, a typo nullo modo tamen separanda; sporae e globoso-ellipsoideae (9-11 × 7-9 μ), in sicco e hyalino pallidissime subfulvescentes.

5. Armillaria Puiggarii Speg. (n. sp.)

Diag. Collybia anulata, coespitosa; pileus primo umbonatus, dein hemisphaerico-explanatus, pallide melleus, glaber, laevis; lamellae ex albo fulvescentes, sinuato-adnatae; stipes teres, deorsum incrassatus, tortus, albus glaber, basi fasciculato-connatus; sporae globoso-ovatae, hyalinae.

Hab. Ad truncos vetustos subputrescentes prope *Apiahy*, Jul. 1881 (sub n. 1532).

Obs. Pileus primo conoideo-ovatus, dein hemisphaerico-expansus (12-16''' dm.), per aetatem plus minusve applanatus ac umbonatus, margine integer, e fulvescente

melleus, laevis glaber; caro alba subsuccosa tenuis (1–2''' crs.); lamellae confertiusculae, membranaceae subtenues, antice attenuato-acutatae, postice adnato-subsinuatae (4–5''' lg. × 0,5–1''' lt.) saepe denticulo minuto subdecurrentes, albae v. pallidissime fulvescentes, acie integerrimae; stipes teres incurvulus (30–50''' lg.), antice attenuatus (2''' crs.), postice obclavato-incrassatus (5''' cras.), basique 3–20 connato-coespitosus, extus albo-fulvescens, glaber laevis v. saepius eximie *fibroso-tortus*, intus albus farctus v. strictissime subfistulosus; anulus albus ad quartum v. quintum superum stipitis adnatus, minutus submenbraneceus, lacerus saepe mox evanescens; sporae e globoso ovoideae inferne minute apiculatae (9–10 × 7–8 μ), non v. granuloso-farctae laeves, in vivo hyalinae, in sicco perdilute fulvescentes.

6. Armillaria procera Speg. (n. sp.)

Diag. Pileus submembranaceus, hemisphaerico-expansus, ex albo fulvescens, centro primo umbonatus, dein depressulus infuscatusque, minute adpresseque squamulosus, margine striatulus, per aetatem rimosus; lamellae albo-pallescentes, latae, decurrentes; stipes badio-rufescens, minute adpresseque fibrillosus, basi saepius incrassatus, superne anulo amplo albo membranaceo fisso ornatus; sporae ovoideo-ellipticae, hyalinae.

Hab. Ad truncos dejectos putrescentes prope Apiahy, Jul. 1888 (sub n. 2901-2).

Obs. Coespitosus; pileus primo ovatus v. conoideus plus minusve umbonatus, dein explanatus (3-8'' dm.), centro saepius depressulus, in juventute dense minuteque furfuraceo-subsquamulosus, per aetatem subglabratus, radiatim grosse parceque rimoso-fissus, margine glaber striatulus, medio fusco-rufescens ambitu pallescenti-subfulvus; caro flocculosa alba vix ad centrum evoluta; lamellae subconfertae membranaceae polymacriae latae (4-5''' lt.),

antice attenuato-acutatae, postice adnato-decurrentes, acie integrae, e pallescente albae saepius albo-farinosulae; stipes incurvulus teres, utrinque incrassatulus (5-7'' lg. × 5-8''' crs.) e fulvescente rufescens v. castaneus, superne pallescens ac anulo amplo patulo-descendente, tenui-membranaceo, margine saepius crenulato ornatus, inferne longitudinaliter dense minuteque fibrilloso-furfurellus, basi saepius subbulbosulo-incrassatus, connato-coespitosus; sporae ovoideae laeves (8-10 × 6-7 μ), hyalinae granuloso-farctae. Species pulchella pileo lamellisque in sicco subpellucidis, summopere hygroscopica, subtenacella, *Arm. mellea* Vahl. nec non *Arm. millo* Sow. peraffinis, ab utraque tamen satis riteque distincta.

7. Clitocybe coprophyla Speg. (n. sp.)

Diag. Cyathiformis; pileus irregulariter infundibularis, cinerascens glaber laevis; lamellae subconfertae e carneo cinerascentes decurrentes; stipes rectus erectus compressulus ex albo cinerascens glaber laevis; sporae ovoideae hyalinae.

Hab. In fimo vetusto subputrescente in sylvaticis uliginosis prope *Apiahy*, Aug. 1881 (sub n. 1619).

Obs. Solitarius v. laxe gregarius; pileus primo hemisphaerico-umbilicatus dein subcyathiformis (20-30''' dm.), margine repandulus undulatus e membranaceo carnosulus sordide obscureque cinerascente glaber laevis integer, in sicco obsolete minuteque concentrice rugulosus; caro tenuis exsucca alba; lamellae arcuato-lineares (1-1,5''' lt.) utrinque attenuatae postice decurrentes e cinereo subroseolae, acie integerrimae ac subfuscescentes, membranaceae confertiusculae; stipes teres v. compressulus (40-50''' lg. × 4-5''' crs.) erectus rectus deorsum saepius v. utrinque (rarius medio tantum) incrassatulus, intus e farcto fistulosus intus albus extus tenacellus rigidulus glaber lae-

vis v. substriatus ex albo subcinerascens postice pallescens ac incrassatus (7-8''' crs.), mycelio araneoso albo parco radicatus; sporae ovoideae (8–10 × 5–6 μ), inaequalaterales non v. 1-guttulatae laeves hyalinae. Species nobilis *Cl. cyathiformi* Fr. atque *Cl. vespertilionis* Brk. cognata, ab utraque tamen satis recedens.

8. Clitocybe catinus Fr. — Sacc., Syll. hym. I, f. 174.
Hab. In sylvis herbosis prope *Apiahy*, Aug. 1881 (sub n. 1568).
Obs. Vix a typo recedit statura minore; sporae ovatae (8–9 × 5 μ) hyalinae.

9. Clitocybe vespertilio Berk. — Sacc., l. c. f. 177.
Hab. In sylvis muscosis ad terram prope *Apiahy*, Maj. 1881 (sub n. 1568).
Obs. Specimina puiggariana ejusdem statum juvenilem facillime sistunt; pileus cyathiformis (25–30''' diam.) repandulus cinerascenti-fuscus, radiatim majuscule striatus hinc inde subrimosus; stipes rectus erectus teres (40–50''' lg. × 2''' crs.) deorsum incrassatulus (5–6''' crs.) pileo pallidior laevis glaber; lamellae arcuato-lineares decurrentes (15''' lg. × 1''' lt.) laxiusculae ex albo sordide pallescentes; sporae desideratae.

10. Clitocybe collybioides Speg. (n. sp.)
Diag. Pileus cyathiformis tenui membranaceus sordide albus radiatim fibrilloso-striatus; lamellae adscendentes lineares angustae confertae vix subdecurrentes albae; stipes rigidulus tenacellus pileo concolor glaber laevis ad pilei confluentiam, caeterum albo-pruinulosus; sporae ovoideo-ellipsoideae hyalinae.
Hab. Ad folia dejecta putrescentia coacervata in sylvis prope *Apiahy*, Apr. 1888 (sine n.).
Obs. Solitarius v. laxe subgregarius; pileus infundibularis

v. cyathiformis ($25'''$ dm. × 12-$15'''$ alt.), submembranaceus dense minuteque radiato-striatus fibrillosus v. subsquamulosus sordide albescens; lamellae lineari-adscendentes confertae strictiusculae ($1'''$ lt.), acie integrae ex albo pallescentes utrinque attenuatae, in stipite non v. vix subdecurrentes; stipes erectus rectus (40–$60'''$ lg. × $1{,}5$–$2'''$ crs.) glaber laevis rigidulus tenacellus subfistulosus apice in pileum expansus, sub pileo pulchre incrassatulus atque albo-farinosulus, basi non v. vix subincrassatus parcissime albo-myceliferus; sporae ovoideae v. ellipticae (10–11 × 5–6 μ) leniter inaequilaterales, laeves, eguttulatae hyalinae. Species habitu collybioideo naturaque submarasmiacea conspicua.

11. Clitocybe buccinula Speg. (n. sp.)

Diag. Pusilla alba tenacella; pileus infundibuliformis laevis glaber margine reflexulus; lamellae subremotae lineares adscendentes; stipes rectus farctus glaber laevis subfuscescens; sporae ovoideae hyalinae.

Hab. Ad terram nudam argillaceam prope *Apiahy,* Apr. 1888 (sub n. 2885 b).

Obs. Solitaria v. saepius geminata; stipes ex albo subfuscescens rigidulus tenacellus teres erectus ($10'''$ lg. × $0{,}5$-$1'''$ crs.) sursum leniter incrassatus abrupte in pileum expansus glaber laevis; pileus membranaceus rigidulus cyathiformis ($5'''$ alt. × 5-$6'''$ dm.) laevis glaber, margine integer v. vix undulatus inflexulus; lamellae lineares subplicaeformes subcrassiusculae subremotae acie obtusae integrae, utrinque attenuatae in stipite leniter decurrentes; sporae ovoideo-inaequilaterales (10 × 6 μ) granuloso-farctae hyalinae. Species minutula *Cl. pacificae* Speg. nonnihil vicina sed praedistincta.

12. Clitocybe macromphala Mntgn.? — Sacc., l. c. f. 182.

Hab. Ad terram uliginosam muscosam in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus membranaceus in sicco subtremelloideo-pellucidus, cyathiformis (25–30‴ diam.) sulcato-striatus, glaber laevis repandulus; lamellae crassiusculae latae (12–15‴ lg. × 3–5‴ lt.) distantes postice subsinuatae, denticulo adnato-decurrentes; stipes teres (20 ‴ lg. × 4–5‴ crs.) fistulosus pileo concolor subtremelloideo-pellucidus, basi glabratus; sporae globosae (4–6 μ) hyalinae. Specimina puiggariana senescentia ac satis obliterata, *Cl. hymenodi* Lév. habitu affinia, ad hanc speciem dubiose relata!

13. Clitocybe Puiggarii Speg. (n. sp.)

Diag. Laccaria; pileus hemisphaerico-umbilicatus, rufescenti-fulvescens, laevis, glaber, ad marginem dense striato-rimosus; lamellae crassae subremotae albo-pallescentes; stipes teres fistulosus superne albus glaber deorsum pallescens ac pruinulosus; sporae globosae verruculosae hyalinae.

Hab. Ad terram muscosam in pratis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Solitaria; pileus primo hemisphaerico-umbilicatus dein explanatus v. subcyathiformis (20–30‴ dm.), margine repandulus submembranaceus, e fulvescente rufescens, centro glaber laevis ambitu dense majusculeque striato-rimulosus; lamellae arcuatae utrinque subattenuatae, antice rotundatae postice adnato-decurrentes (10‴ lg. × 2-3‴ lt.) membranaceo-crassiusculae albo-pallescentes subfarinosulae, acie integerrimae; stipes rectus erectus (30–40‴ lg. × 3-4‴ crs.) teres laevis glaber non v. vix basi subincrassatus; sporae globosae (8–10 μ) dense minuteque verruculosae grosse 1-guttulatae, hyalinae.

14. Clitocybe pulchella Speg. (n. sp.)

Diag. Laccaria, pusilla rosea v. cinerascenti-violascens: pileus hemisphaerico-umbilicatus, glaber laevis margine subinvolutus; lamellae strictissimae distantes crassiusculae;

stipes utrinque subincrassatus basi mycelio albo-tomentosulo vestitus radicatusque; sporae globosae verruculosae hyalinae.

Hab. Ad ramenta putrida in sylvis prope *Apiahy*, Jun. 1882 (sub n. 2369).

Obs. Pileus hemisphaericus centro plus minusve depressus v. umbilicatus (5-6''' dm.) non v. vix radiatim striatus e cinerascente roseus v. subfulvescens pruinula glaucescente adspersus, margine (in sicco) involutus, membranaceus rigidulus; lamellae remotae lineares crassiusculae subplicaeformes utrinque attenuatae, postice vix decurrentes, acie obtusae integrae pileo concolores; stipes rectus erectus teres (6-10''' lg. × 0,5''' crs.) utrinque non v. vix subincrassatus e fuscescente roseo-violascens, deorsum albo-pruinulosus, mycelio albo-tomentosulo radicatus; sporae globosae (6-8 μ) leniter denseque verruculosae hyalinae. Species tenacella submarasmioidea *Cl. laccatae* Scop. ac *Cl. echinosporae* Sp. peraffinis, ab utraque satis riteque distincta.

15. Collybia subfumosa Speg. (n. sp.)

Diag. Pileus e convexo umbilicatus glaber laevis fusco-pallescens; lamellae strictiusculae confertae ex albo cinerascentes; stipes elongatus flexuosulus fibroso-striatus pileo pallidior albo-pruinulosus; sporae non visae.

Hab. Ad basin truncorum in sylvis prope *Apiahy*, Maj 1888 (sub n. 2914).

Obs. Coespitosa v. subsolitaria; pileus primo hemisphaericus dein convexulo-expansus (25-30''' dm.), margine incurvulus (in sicco subinvolutus), centro plus minusve umbilicatus laevis glaber, in sicco dense minuteque concentrice ruguloso-crispatus, pallide e fusco fulvescens integer; caro alba subexsucca centro crassiuscula (3-4''' crs.) ambitu evanescens; lamellae membranaceae strictae (1''' lt.) confertae polymacriae utrinque attenuatae subadscen-

dentes non v. vix decurrentes ex albo cinereae, acie integerrimae ac pallidiores; stipes incurvus teres rigidulus pallescens tenacellus (30-50''' lg. × 4-5''' crs.), extus dense fibriso-striatus, glaber v. pruinula alba detersili adspersus, basi subincrassatus atque pulverulento-velutinus, intus fibroso-farctus. Species e carnosulo lenta pulchella habitu inter *Clitocybes* atque *Pleurotos* media, lamellarum natura tamen *Collybiis* melius adscribenda.

16. Collybia? latifolia Speg. (n. sp.)

Diag. Pileus applanatus subcarnosulo-membranaceus pallide fulvescenti-cinnamomeus, substriatus pruinulosus; lamellae tenuissime membranaceae confertae pro ratione latissimae candidae; stipes rectus rigidus tenax badius deorsum pruinulosus; sporae ovatae, hyalinae.

Hab. Ad ramenta foliaque dejecta putrescentia in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus applanatus (20-25''' diam.) plus minusve convexus v. concaviusculus, margine integer, centro depressulus, obscure striatus pruinula densissima adpressa pallide fulvescenti-cinnamomea vestitus; caro vix centro evoluta alba exsucca; lamellae antice attenuato-acutatae postice truncato-v. sinuato-adnatae confertissimae tenuissime membranaceae, latae (10''' lg. × 3-4''' lt.) polymacriae acie integrae albae (in sicco) pallescentes; stipes teres flexuosulus (30-40''' lg. × 1-1,5''' crs.) tenax durus sublignosus badius, sursum glaber deorsum rufescenti-pulverulentus fistulosus; sporae e globoso ovatae (4-5 × 2,5-4 μ) inaequilaterales hyalinae. Species pulchella gracilis tenax marasmioidea.

17. Collybia apiahyna Speg. (n. sp.)

Diag. Pileus convexo-umbilicatus glaber pallescens laevis; lamellae subconfertae strictiusculae utrinque attenuatae dente adnatae fusco-pallescentes; stipes longissimus gra-

cilis badius fistulosus laevis deorsum sensim incrassatus ac ferrugineo-pruinulosus.

Hab. Ad folia nec non strobilos dejectos putrescentes *Araucariae brasiliensis* in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2911).

Obs. Laxe gregarius; pileus submembranaceus primo hemisphaericus dein convexo-expansus (5-10''' dm.), centro depresso-umbilicatulus ex albo pallescens glaber v. vix subpruinulosus laevis, margine integer incurvulus non v. obscure substriatus; lamellae confertiusculae membranaceae strictiusculae (0,5''' lt.) subarcuato-lineares polymacriae antice acutato-attenuatae postice attenuato-adnatae, acie integrae primo albae dein fusco-pallescentes; stipes elongatus rectus erectus gracilis (50-100''' lg.) e badio castaneus opacus laevis sursum glaber attenuatus (0,5-1''' crs.) deorsum incrassatulus (1-2,5''' crs.) ferrugineo-pulverulentus, basi pallescens, fistulosus, rigidulus, tenacellus; sporae non visae.

18. Collybia ? perstrictifolia Speg. (n. sp.)

Diag. Parvula, marasmiacea, cinerascens; pileus e convexulo umbilicatus pallide testaceo-cinerascens laevis pulverulentus; lamellae confertissimae strictissimae tenues albae; stipes flexuosus subfistulosus cinerascens glaber v. subpulverulentus; sporae ovoideae hyalinae.

Hab. Ad ramenta *palmarum ?* putrescentia in campis prope *Apiahy*, Aug. 1880 (sub n. 1579-80).

Obs. Solitaria; pileus orbicularis integer primo convexulus dein centro depressulus v. subumbilicatus e carnosulo membranaceus (5-12''' dm.), lentus, cinerascens pruinula cervina tenuissima vestitus; lamellae lineares, tenues confertissimae strictissimae utrinque attenuatae subsinuatae polymacriae acie integerrimae albae v. in sicco pallidae; stipes erectus rectus teres (35-45''' lg. × 1''' crs.) rigidulus tenax fistulosus pileo concolor, deorsum non v.

canescenti-pruinulosus, basi incrassatus sed saepius mycelio parco subferrugineo strigosule ornatus; sporae ovoideo-inaequilaterates (10 × 6 μ), laeves, granuloso-farctae, hyalinae. Species *Marasmiis* proxima, lamellarum tamen natura *Collybiis* adscripta.

19. Collybia? violacella Speg. (n. sp.)

Diag. Pileus orbicularis tenui-membranaceus subpellucidus glaber striato-subsulcatus violaceus; lamellae remotae crassiusculae adnatae rugis transversis densis junctae; stipes erectus rectus tenuis sordide fusco-violascens glaber laevis; sporae e globoso ovoideae hyalinae.

Hab. Ad folia dejecta coacervata putrescentia in sylvis prope *Apiahy*, Maj. 81 (sub n. 1542).

Obs. Solitaria, inodora; pileus tenui-membranaceus subpellucidus rigidulus fere tremelloideus (in sicco), convexulus v. applanato-expansus (12–15''' dm.) centro e depresso subumbilicatus, margine subcrenulatus acutus rectus, glaber, laevis, modice laxeque radiatim costulatus in vivo pulchre violaceus, in sicco pallide fulvescens: lamellae remotae substrictiusculae (0,5–0,8''' lat.) crassiusculae subpellucidae, pileo vix pallidiores, antice attenuatae postice acute adnatae v. denticulo subdecurrentes, polymacriae, rugis v. plicis transversis centro crebriusculis majusculisque marginem versus gradatim remotioribus ac tenuioribus regulariter fenestratim junctae; stipes teres gracilis rectus (60–70''' lg. × 1–1,5''' crs.) sordide fusco-violascens, opacus rigidulus subfistulosus glaber laevis apice non v. vix incrassatus, ima basi nodulosus ac mycelio parcissimo albicante vestitus: sporae ovoideae (6–7 × 4–5 μ) inaequilaterales, 1-guttulatae, laeves, hyalinae. Species pulcherrima *Col.? hymeniicephala* Speg. affinis, satis tamen distincta, generi *Heliomyceti* accedens.

20. Mycena punicella Fr.? — Sacc., l. c. f. 257.

Hab. Ad terram muscosam in sylvis umbrosis roridis prope *Apiahy*, Mart. 1888 (sub n. 2879).

Obs. Specimina nonnihil obliterata, magnitudine summopere ludentia, a typo base stipitis pallescenti-alba nec viridi-atra praecipue recedentia; sporae ovoideae v. ellipticae (8-9 × 4-5 μ), laeves, hyalinae.

21. Mycena erythrella Mntgn. — Sacc., l. c. f. 262.

Hab. Ad terram muscosam in uliginosis sylvaticis prope *Apiahy*, Aug. 1880 (sine n.).

Obs. Pileus 10-20‴ dm; lamellae 1-1,5‴ lt. acie perdilute purpurascentes; stipes 30-35‴ lg. × 1-2‴ crs. A typo recedit pileo pallidiore ac subfuscescente, lamellisque deorsum attenuatis apicem stipitis attingentibus. Sporae ellipticae v. ovoideae (7-8 × 4-5 μ), laeves, hyalinae.

22. Mycena pileum-turcicum Mntgn. — Sacc., l. c. p. 274.

Hab. Ad terram muscosam in uliginosis prope *Apiahy*, Maj. 1881 (sub n. 1493).

Obs. Specimina apiahyensia formam pusillam sistunt; pileus 3‴ lt. × 3‴ alt.; stipes 20‴ lg. × 0,5‴ crs.; sporae elliptico-globosae (5-6 × 4-5 μ) laeves hyalinae.

23. Mycena atro-purpurea Mntgn. — Sacc., l. c. f. 274.

Hab. Ad terram muscosam in sylvis roridis prope *Apiahy*, Jun. 1881 (sine n.).

Obs. Pileus hemisphaericus 10‴ lt. × 6-7‴ alt.; stipes 30-35‴ lg. × 1-1,5‴ crs.; fungus totus pulchre obscureque fusco-coccineus, lamellis vix pallidioribus; sporae ex ovoideo subglobosae (7-8 × 4-5 μ) laeves, hyalinae.

24. Mycena subsaccharifera Speg. (n. sp.)

Diag. Pusilla, albida, granulis nitentibus obsita; pileus hemisphaerico-umbilicatus tenui-membranaceus; lamellae arcuato-decurrentes tenues remotiusculae acie granulosae

albae; stipes filiformis albus basi vix incrassatulus atque puberulus; sporae ovatae laeves hyalinae.

Hab. Ad ramenta dejecta putrescentia prope *Apiahy*, Jun. 1888 (sub n. 2908).

Obs. Pileus tenuissime membranaceus primo hemisphaerico-subglobosus pulverulento-fuscidulus, dein convexo-expansus (2–4‴ dm.) plus minusve profunde umbilicatus granulis paucis minutissimis (centro praecipue) subfuscescenti-succineis nitentibus adspersus, margine non v. vix sulcato-striatus, integer; lamellae pileo concolores v. pallidiores, utrinque attenuatae, postice acute adnato-decurrentes subremotae strictiusculae tenuiusculae, acie obtusulae integrae granulis pellucido-subsuccineis nitentibus ornatae; stipes elongatus rectus gracilis (10–15‴ lg. × 0,5‴ crs.) albus glaber laevis basi insititius non v. vix bulbillosus ac albo-pruinolusus; sporae ellipticae v. ovatae (10 × 4-5 μ) inaequilaterales laeves hyalinae. Species lamellis postice decurrentibus *Omphaliis* accedens, *M. sacchariferae* B. et Br. tamen peraffinis, a qua recedit pileo umbilicato stipite longiore sporisque majoribus.

25. Mycena capillaris Schm. — Sacc., l. c. f. 303.

Hab. Ad folia ramulosque dejectos putrescentes in sylvis prope *Apiahy*, aut. 1888 (sub n. 2462).

Obs. Specimina brasiliensia varietatem pileo dilute cinerascenti-roseo sporisque ellipticis submajoribus (10 × 6 μ) laevibus hyalinis donatam sistunt.

26. Hiatula subcoespitosa Speg. (n. sp.)

Diag. Pallescens, coespitosula; pileus subhemisphaericus tenuissimus sublaevis, subpulverulentus; stipes glaber validulus; lamellae angustissimae subplicaeformes inter se remotae, longiores stipitis apicem attingentes.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1647).

Obs. Pileus hemisphericus (5-15‴ dm.) ex albo pallescens in sicco subcinerascens, primo saepe umbonatus ac pulverulentus dein depressulus v. subumbilicatus, tenuissime membranaceus subpellucidus glaber sublaevis, margine integer incurvulus; lamellae inter se remotissimae, subplicaeformes subcrassiusculae utrinque attenuatae pileo pallidiores postice apice stipitis adnatae v. denticulo vix subdecurrentes; stipes erectus rectus v. subcurvulus validulus utrinque incrassatulus (10-15‴ lg. × 1-1,5‴ crs.) fistulosus, pileo concolor v. vix obscurior deorsum coespitoso-connatus, glaber laevis; sporae elliptico-ovatae (6 × 3 μ) leniter inaequilaterales, utrinque acutiusculae, laeves, hyalinae. Species 5-20-coespitosa e rimis ligni putridi erumpens, *H. coespitosae* B. et C. cognata, sed cum speciminibus typicis comparata satis recedens. *Mycena phylloclada* B. et C. est species facillime *Hiatulis* adscribenda et *H. coespitosae* B. et C. etiam peraffinis, secundum specimina quae mihi adsunt.

27. Omphalia? brasiliensis Speg. (n. sp.)

Diag. Coespitosa; pileus tenuis convexo-umbilicatus umbone parvulo in depressione ornatus, laevis glaber, sordide pallescens; lamellae albae confertae latiusculae adnato-subdecurrentes, interstitiis venulosis; stipes teres incurvulus pileo concolor utrinque incrassatulus laevis glaber; sporae elliptico-ovoideae laeves hyalinae.

Hab. Ad caudices vetustos muscosos in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2881).

Obs. 3-10-coespitosa; pileus tenuis subpellucidus primo subhemisphaericus dein convexulo-explanatus (10-25‴ lt.), centro abrupte profundeque umbilicatus (depres. 1-4‴ dm.), in depressionis centro saepius umbone parvulo donatus, laevis glaber in vivo albus?, in sicco sordide pallescens, margine rectus tenuissimus integer; lamellae subconfertae membranaceae, acie integrae latae (1,5-2‴

lt.), antice acutatae, postice adnatae plus minusve decurrentes pallescentes (in vivo albae?); stipes tenuis mediocris (20-30''' lg. × 1,5-2,5''' crs.), pileo concolor fistulosus glaber laevis basi connatus; sporae subinaequilaterales (5-6 × 2-2,5 μ), granuloso-farctae, laeves, hyalinae.

28. Omphalia ? cupreo-virens Speg. (n. sp.)

Diag. Coespitoso-fasciculata; pileus orbicularis umbilicatus subcarnosulus virescens laevis glaber; lamellae confertae strictae pileo vix pallidiores arcuato-decurrentes; stipes elongatus sursum teres cupreo-virens deorsum incrassatulo-connatus pallescens glaber laevis; sporae laeves, hyalinae.

Hab. Ad ligna cariosa mucida in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. 5-20-fasciculato-coespitosa; pileus primo hemisphaericus dein convexo-expansus (4-8''' dm.), centro depressus v. umbilicatus, subcarnosulus laevis glaber e pallescente virescens, fibrillis minutis ambitu confertioribus obscure virescentibus (in sicco testaceo-rufescentibus) notatus, margine primo incurvulo dein recto explanatoque donatus; lamellae strictissimae confertae, acie integerrimae, utrinque attenuato-acutatae, apicem stipitis attingentes ac plus minusve decurrentes; stipes elongatulus (30-50''' lg.) sursum teres gracilis (1-1,5''' crs.) cupreo-virescens (in sicco subtestaceo-purpurascens), rectus, deorsum sensim incrassatulus (2,5-3''' crs.) dealbatus, basi coespitose connatus, glaber laevis; sporae globosae (5 × 4 μ) inferne apiculatae, laeves, hyalinae.

29. Omphalia fibula Bull. — Sacc., l. c. f. 331.

Hab. Ad ligna emarcida muscosa in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2368).

Obs. Specimina formam pusillam pileo 4-5''' dm., stipite 10-15''' lg. × 1''' crs., sporis ellipsoideis (4-5 × 2-3 μ) laevibus hyalinis donatam sistunt.

30. Pleurotus submutilus Speg. (n. sp.)

Diag. Clitocybiarius; pileus subcarnosulus excentricus infundibulari-dimidiatus glaber laevis v. vix margine substriatus (25''' dm.) fulvus; lamellae postice decurrentes ferrugineo-fulvae; stipes sordide albescens glaber laevis sursum teres deorsum sensim incrassatus; sporae laeves hyalinae.

Hab. Ad terram humosam in sylvis prope *Apiahy*, Jun. 1881 (sine n.).

Obs. Solitarius; pileus infundibulari-subspathulatus (25''' dm.) ex uno latere tantum bene evolutus, ex altero non v. vix productus, tenuis, fulvus glaber laevis v. vix ambitu subtiliter striatus, margine acutiusculo recto repandulo donatus; lamellae confertiusculae polymacriae strictae (1''' lt.) acie integrae, utrinque attenuato-acutatae, postice decurrentes, pulchre fulvo-ferrugineae; stipes erectus rectus e fulvescente albescens (20''' lg.) apice teres (2''' dm.) pallescens, deorsum sensim incrassatus, (3''' crs.) glaber laevis, basi abrupte rotundatus, mycelioque parcissimo albo-puberulo radicatus, subfistulosus; caro pilei stipitisque alba; sporae subellipticae ($6-7 \times 3-4\ \mu$) inaequilaterales laeves hyalinae. Species nobilis *Pl. oleario* Fr. atque *Pl. mutilo* Fr. affinis, ab utraque tamen satis distincta.

31. Pleurotus brasiliensis Speg. (n. sp.)

Diag. Tricholomatarius; pileus centralis carnosulus convexus laevis glaber laete fulvo-lateritius v. rufescens; lamellae adnatae confertae albae; stipes incurvus teres albus laevis glaber; sporae laeves hyalinae.

Hab. Ad corticem truncorum putrescentium in sylvis prope *Apiahy* Maj. 1888 (sub n. 2886-88).

Obs. Solitarius v. saepe subcoespitosus; pileus primo hemisphaerico-umbonatulus dein explanato-expansus (20-40''' dm.) non v. parce subumbilicatus, carnosulus laevis

glaber, margine integro incurvulo ; caro alba succosa parum evoluta; lamellae membranaceae confertae polymacriae latiusculae (1–2''' lt.) antice attenuatae postice adnatae, acie integerrimae albae v. vix pallescentes; stipes incurvulus teres (20–30''' lg. × 2–4''' crs.) glaber laevis albus basi non v. parce incrassatus ac saepius tenuiter albo-puberulus v. subhispidulus, intus e farcto cavus albus; sporae subsphaeroidae v. ovoidae (4–6 × 4 μ), laeves, non v. 1-guttulatae hyalinae. Species *Pl. ulmario* Bull. affinis satis tamen distinctus.

32. Pleurotus commiscibilis B. et C. — Sacc., l. c. f. 353.
Hab. Ad truncos dejectos putrescentes in umbrosis prope *Apiahy*, Apr. 1888 (sine n.).
Obs. Species pulchella rigidula tenacella et forsam statum juvenilem *Pani laciniato-crenati* Speg. sistens, alba glabra; pileo dimidiato-spathulato repando-lobato carnosulo; stipite obconico plus minusve evoluto crassiusculo concolore laevi ; lamellis subconfertis membranaceis latiusculis decurrentibus albis ; sporis ellipsoideis (8–10 × 3,5–4,5 μ) laevibus hyalinis.

33. Pleurotus pulmonarius Fr. — Sacc., l. c. f. 362.
Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1534).
Obs. Dimidiatus, solitarius v. subcoespitosus; pileus horizontalis e reniformi spathulatus (30-60''' dm.) carnosulus laevissimus glaber ex alutaceo fulvescens, margine incurvulus non v. vix striatulus, postice in stipite brevissimo crassiusculo villosulo albo productus; caro alba flocculoso-succosa ; lamellae subconfertae polymacriae, utrinque attenuatae, postice decurrentes, crassiuscule membranaceae, latissimae (2–4 lt'''.), acie integrae ex albido lividae; sporae ellipsoideae (9–11 × 3-4 μ) laeves hyalinae.

34. Pleurotus submitis Speg (n. sp.)

Diag. Dimidiatus; pileus orbiculari-cordatus, carnosulus, postice depressus alutaceus laevis glaber; lamellae confertae utrinque attenuatae concolores; stipes breviusculus teres glaber pallescens; sporae globosae hyalinae.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1881 (sine n.).

Obs. Solitarius; pileus tenui-carnosulus orbiculari-convexulus ($10'''$ dm.) postice depressus ac profunde sinuato-cordatus emarginatus, laevis glaber, margine integro obtusulo, pallide e pallescente fulvus; caro compactiuscula rigidula alba; lamellae confertiusculae dimacriae, tenui membranaceae, acie integrae, ventricosulae ($1'''$ lt.) utrinque attenuatae, postice subsinuato-decurrentes, pileo concolores v. vix obscuriores; stipes horizontalis teres ($1-5'''$ lg. $\times$ $0,5-1'''$ crs.) albescens primo pulverulento-fulvellus, dein glaber laevis albus in pileo ad centrum usque productus adnatusque; cystidia magna obtuse lanceolala (60-75 $\times$ 15-18 μ, cum stipite) hyalina; basidia clavulata (25-30 $\times$ 8 μ) laevia hyalina; sporae globosae (4–6 μ), laeves, hyalinae non v. 1-guttulatae. Species pusilla *Pl. miti* Pers. affinis.

35. Pleurotus lichenicolus Speg. (n. sp.)

Diag. Resupinatus; pileus excentrice suborbicularis, e latere sinuato-cordatus, dorso adfixus membranaceus, albo-cinerascens, puberulus laevis; lamellae subconfertiusculae utrinque attenuatae albae; sporae ellipsoideae laeves hyalinae.

Hab. In *Usnea* quadam ad truncos prope *Apiahy*, Jun. 1881 (sine n.).

Obs. Solitarius v. hinc inde 3-5-gregarius; pileus membranaceus hemisphaerico-cupulatus ($4-8'''$ dm.) orbicularis v. reniformis, margine incurvulus integer repandulus laevis, primo cinerascens dense minuteque pulverulento-

pruinulosus dein subglabratus albus, dorso puncto minuto adfixus ; lamellae e puncto subcentrali pilei radiantes confertiusculae, utrinque attenuatae, membranaceae pro ratione sublatiusculae (0,5–0,8''' diam.), acie integerrimae albae, in sicco pallescentes; sporae ellipsoideo-ovatae, (8-10 × 5-6 μ) crassiuscule tunicatae, laeves, hyalinae. Species pulchella *Pl. lilliputiano* Mntgn. peraffinis, sed satis distincta videtur.

36. Pleurotus Puiggarii Speg. (n. sp.)

Diag. Pilei effuso-reflexi dense gregarii carnosuli alutace superne crebre lamelloso-hirti; lamellae confertiusculae crassiuscule membranaceae latiusculae pileo pallidiores decurrentes; sporae ellipsoideae laeves hyalinae.

Hab. Ad corticem truncorum putrescentium in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2560).

Obs. Pilei plus minusve dense gregarii late effuso-reflexi v. dimidiato-spathulati, saepe imbricati v. utrinque inter se connati, polymorphi unguiculati flabellati etc., (5-20''' dm. trans. × 4-10''' dm. ant.-post.) horizontales in vivo carnoso-molles, in sicco subtenacelli rigiduli, superne sub applanati ac laminulis radiantibus densis subcrassiusculis alutaceo-fulvis antice dilatatis bifidisque laciniis plus minusve elongatis rectis subsubulatis apice obtusis vestiti, interstitiis pallescentibus minutissime puberulis; caro alba compacta flocculoso-succosa; lamellae polymacriae confertae, ventricosae (1-2''' lt.), lanceolatae, membranaceae, antice obtusiuscule acutatae, postice attenuato-decurrentes, ac ima basi saepe confluentes, acie integrae v. subdenticulatae ex albo pallide alutaceae; sporae ellipsoideo-cylindraceae (8–9 × 4-5 μ) laeves hyalinae. Species eximia pulcherrima *Polysticto Hariotiano* Speg. habitu simillima!

37. Marasmius candidus (Bolt.) Fr. — Sacc., l. c. f. 533.

Hab. Ad ramulos dejectos putrescentes in dumetis prope *Apiahy*, Jun. 1888 (sine n.).

Obs. Forma stipite capillari elongato (10-15''' lg.), pileo convexulo subumbilicatulo (2''' dm.) laevi, lamellis subdecurrentibus donata, ad *M. petiolorum* B. et C. vergens.

38. Marasmius hematocephalus Mntgn. — Sacc., l. c. f. 540.

Hab. Ad ramenta dejecta putrescentia in sylvis prope *Apiahy*, Aut. 1881-88 (sine n.).

Obs. Species pulcherrima! Pileus rubro-sanguineus, hymenium, in vivo, flavum, in sicco roseo-pallescens. Sporae non visae.

39. Marasmius decurrens Mntgn. — Sacc., l. c. f. 549.

Hab. Ad folia dejecta putrescentia in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Species pulchella *M. capillipede* Sacc. et *M. sphaerodermo* Speg. fere intermedia. Sporae non visae.

40. Marasmius polycladus Mntgn. — Sacc., l. c. f. 553.

Hab. Ad cortices truncorum putrescentium in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2465).

Obs. Species *M. trichorhyzo* Speg. peraffinis, pileo tamen obscuriore lamellis pallidioribus mycelioque magis simplice recedens.

41. Lentinus crinitus Fr.—Sacc., l. c. f. 576.

Hab. Ad truncos dejectos putrescentes prope *Apiahy*, Aut. 1881-88 (sub n. 1505).

Obs. Specimina puiggariana a typo nonnihil deflectunt et saequenti accedunt. Pileus infundibuliformis (40-50''' dm.) margine integer involutus, tenuis (0,5''' crs.) coriaceus rigidus centro subglabratus sordide fuscescens, ceterum dense minuteque substriato-fibrillosus, ambitu longe laxeque pilosus, pilis flexuoso-subcircinatis, pulchre in-

tenseque castaneus v. fusco-testaceus; lamellae confertae, latiusculae ($2'''$ lt.), membranaceae, rigidulae, acie acutatae minute denseque denticulato-erosulae, e fuscescente v. cinerascente pallescentes, utrinque attenuatae, postice decurrentes ac ima basi laxe reticulato-anastomosantes; stipes erectus, flexuosus, rigidus coriaceus gracilis (70–$80'''$ lg. $\times$ $3'''$ crs.) utrinque leniter incrassatus, superne dense minuteque rufescenti v. pallescenti pulverulento-squarrulosus, medio glaber laevis pallescenti-fulvescens subnitens, basi squarruloso-squamulosus fuscus, intus farctus (vix summo apice breviter fistulosus), lignicolor. Sporae non visae.

42. LENTINUS SCHNYDERI Speg. — Sacc., l. c. f. 579.
Hab. Ad truncos cariosos putrescentes prope *Apiahy*, Oct. 1888 (sub n. 2935).
Obs. Species intermedia inter *L. crinito* Fr. et *L. nigripede* Fr., satis tamen distincta; specimina brasiliensia nullo modo a bonaërensibus deflectunt.

43. LENTINUS CRASSIPES Berk. — Sacc., l. c. p. 576.
Hab. Ad truncos emortuos putrescentes in sylvis prope *Apiahy*, Aug. 1881 (sine n.).
Obs. Pileus hemisphaerico-infundibularis ($40'''$ dm.) tenuis coriaceus rigidus, margine involutus integer, centro laxe squamoso-villosus castaneus, ambitu dense longeque fulvo-strigosus, pilis longis intricatis circinatis; lamellae tenues submembranaceae confertae latiusculae ($1,5$–$2'''$ lt.) acie acutissimae dense minuteque denticulatae, e fulvo v. roseo subglaucescentes, margine pallidiores utrinque attenuatae ima basi non v. vix confluentes; stipes erectus rigidus coriaceus crassus (25-$30'''$ lg. $\times$ $5'''$ crs.) deorsum sensim incrassatus extus apice pallescenti-pulverulentus, caeterum pallide badius dense minuteque furfuraceo-squamulosus, intus farctus lignicolor. Sporae non visae.

44. Lentinus tener Klotsch. — Sacc., l. c. p. 576.

Diag. Ad truncos dejectos emarcidos in umbrosis prope *Apiahy*, Oct. 1880 (sub n. 14).

Obs. Specimina puiggariana pusilla, pileo infundibulari (15''' dm.), lamellis confertis pro ratione latiusculis (1''' lt.) e carneo pallescentibus, stipite brevissimo (7-8''' lg. × 2-3''' crs.) apice striato subpulverulento caeterum glabro. An praecedentium tantum varietas v. forma depauperata?

45. Lentinus villosus Klotsch. — Sacc., l. c. f. 574.

Hab. Ad truncos dejectos cariosos in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2896).

Obs. Pileus e globoso hemisphaericus (10-30''' dm.), centro profunde umbilicatus tenuis rigidus coriaceus margine integer involutus ubique pulchre denseque subsquamosus, squamis apice longe strigoseque sfacelato-pilosis, pilis intricato-circinatis, sordide e fulvo v. fusco castaneus; lamellae subconfertae, membranaceo-crassiusculae, latae (2-2,5''' lt.) e pallescenti albae, acie acutatae denticulatae utrinque attenuatae, postice decurrentes dense minuteque reticulato-anastomosantes; stipes teres rectus (10-25''' lg. × 2-3''' crs.) erectus apice pallidus pulverulentus caeterum fuscus, fibrilloso-velutinus, basi dense patuleque hispido-villosus. Sporae non visae.

46. Lentinus velutinus Fr. — Sacc., l. c. f. 589.

Hab. Ad palos vetustos intemperiis expositos in hortis prope *Apiahy*, Dec. 1880 (sub n. 1515).

Obs. Specimina puiggariana perpulchra! Pileus infundibularis (100-120''' alt. × 70-80''' lt.) papyraceo-membranaceus rigidulus pulchre e cinnamomeo rufescens, dense minuteque puberulo-velutinus, per aetatem subglabratus, saepe laxe concentrice zonatus atque striis minutissimis densissimis radiantibus notatus, margine repandulus inte-

ger hispidulus; lamellae confertissimae strictissimae (0,5–0,7''' lt.) acie integerrimae utrinque attenuatae, pileo pallidiores; stipes erectus teres validus (60–100''' lg. × 5–10''' crs.) extus cinnamomeo-velutinus, intus albus farctus.

47. Lentinus Lecomtei Fr. — Sacc., l. c. f. 572.

Hab. Ad caudices subputrescentes in sylvaticis prope *Apiahy*, Jun. 1888 (sub n. 2377).

Obs. Specimina brasiliensia cum illis Americae septentrionalis (*Ellis*, Nort-Am. Fung. n. 403) perfecte congruentia; nullo modo tamen cum africanis (*Thuemen*, Myctlı. univ. n. 603 b) comparanda!

48. Lentinus perpusillus Speg. (n. sp.)

Diag. Pusillus, totus sericeo-nitens; pileus ovato-umbonatus subrufescens, dense adpresseque strigoso-subsquamulosus; lamellae strictissimae albae integrae; stipes teres erectus albus glaber.

Hab. Ad culmos dejectos putrescentes *Bambusae* cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1644).

Obs. Plus minusve dense gregarius, rarius subsolitarius; pileus ovatus v. subglobosus superne late obtuseque umbonatus (1,5–2''' lt. et alt.) margine stipiti adpressus integer involutus, tenui membranaceus rigidulus, centro rufescenti-fulvus ambitu pallescens, pilis praelongis densissimis adpressissimisque subnitentibus vestitus; lamellae membranaceae densae strictissimae acie integrae albae utrinque attenuatae; stipes teres (5''' lg. × 0,5 crs.) erectus vix deorsum lenissime incrassatus albus v. pallescens, glaber, laevis rigidulus sericeo-nitens. Sporae ellipticae (6 × 3 μ) hyalinae, laeves. Species pulchella minutie nitore ac pilei forma mox dignoscenda.

49. Panus conchatus Fr. — Sacc., l. c. f. 615.

Hab. Ad palos vetustos putrescentes in hortis prope *Apiahy*, Maj. 1888 (sine n.).

50. Panus hymenorhyzus Speg. (n. sp.)

Diag. Candidus; pileus dimidiato-reniformis, postice non v. vix marginatus laevis glaber; lamellae subconfertae strictissimae ex albo pallescentes; stipes definite lateralis brevis teres albus glaber laevis basi in mycelium glabrum tenuissime membranaceum subpellucidum album latissime arctissimeque per matricem serpens expansus; sporae e globoso ovoideae, laeves, hyalinae.

Hab. Ad folia ramentaque arborum coacervata putrescentia in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2467).

Obs. Mycelium submucedineo-membranaceum anhistum latissime expansum (5-50″ diam.), arctissime matrice adnatum quandoque tenuissimum pellucidum quandoque subcrassiusculum opacum, album subnitens glabrum laeve v. spurie tuberculosum v. bullosum; pileus primo regularis hemisphaericus margine integer ac involutus, dein e latere tantum evolutus ac subdimidiatus, suborbicularis v. subreniformis (5-20‴ dm.), e latere manco non v. plus minusve stricte marginatus laevis glaber albus; lamellae lineares tenuissimae strictissimae subconfertae polymacriae ex albo pallescentes, acie integerrimae; stipes teres brevis (3-10‴ lg. $\times$ 0,5-1‴ crs.) pileo concolor laevis glaber, deorsum lenissime incrassatus. Species pulcherrima nobilissima, mycelii natura mox dignoscenda.

51. Panus laciniato-crenatus Speg. — Sacc., l. c. f. 621.

Hab. Ad truncos emortuos v. languentes in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1537).

Obs. Specimina brasiliensia parvula senescentia, speciei sequenti proxima; sporae elliptico-cylindraceae (6-9 $\times$ 3 μ) laeves hyalinae.

52. Panus eugrammus (Mntgn.) Fr. — Sacc., l. c. f. 626.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Jul. 1881 (sub n. 1502).

Obs. Pilei coespitosi saepeque imbricati, spathulati v. flabellati (20-40''' dm.), postice truncati v. truncato-cuneati, glaberrimi laevissimi, in vivo carnoso-molles subhygrophani, in sicco membranaceo-coriacei, rigiduli, radiatim sulcati margine dense striati, repando-lobati, centro pallescentes, margine rufescentes (in sicco !); lamellae membranaceae confertae latiusculae (2-3''' lt.) in vivo albo-pallescentes, in sicco pallescenti-rufescentes, acie integrae utrinque attenuatae: stipes vix evolutus, crassiusculus albus laevis glaber; sporae ex elliptico ovatae (8-9 × 6 μ) laeves, 1-guttulatae, hyalinae. Species priori peraffinis inter *Pleurotum* et *Panum* nutans.

53. Lenzites polita Fr. — Sacc., l. c. f. 649.

Hab. Ad caudices emortuos cariosos in sylvis prope *Apiahy*, Aug. 1881 (sub n. 1496).

Obs. Specimina brasiliensia a guaraniticis nonnihil recedunt, colore subroseolo omnium partium, pileo flabellato (30-40''' dm.) postice cuneato v. cordato ac in stipite verticali recto crassoque (40''' lg. × 5-6''' crs.) concolore lignoso duro producto.

54. Lenzites polita Fr.

Var. *dedaleoides* Speg.

Hab. Ad truncos humo obovolutos mucidos in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Varietas nova a typo recedens, pileo lacteo flabellato-reniformi (40-70''' dm.) postice immarginato, stipite horizontali brevissimo crassoque saepeque peltato-dilatato atque praecipue lamellis albo-pallescentibus postice dense sinuoso-gyrosis dedaloideis antice flexuosis furcatisque densiuscule anastomosantibus strictioribus (2''' lt.) ac subcrassioribus. An ejusdem status juvenilis?

55. Lenzites flaccida (Bull.) Fr. — Sacc., l. c. f. 638.

Hab. Ad palos ramos truncosque emortuos putrescentes prope *Apiahy*, per ann. 1881–88.

Obs. Species, ut *Polystictus versicolor* (L.) Fr., summopere ludens, ac varietates sequentes nobiliores mihi describendae videntur :

A) *Subtypica* (sub n. 1496). Pilei horizontales dimidiati v. flabellati postice truncati v. cuneati (30–50''' dm. trs. × 20–40''' dm. ant.-post.) superne concentrice densiuscule zonati, hispidulo-velutini, opaci, unicolores, pallescentes margine acuti integri ; caro alba (0,5''' crs.) stupposa ; lamellae confertae membranaceae latiusculae (1,5–2''' lt.) integrae ex albo-pallescentes, postice plus minusve reticulato-anastomosantes.

B) *Robusta* (sub n. 1686). Pilei resupinati orbiculares v. dimidiato-reflexi (40-80''' dm.), umbone postico crasso adnati, superne densiuscule concentrice zonati, velutini, opaci, unicolores pallescentes, margine integri acuti ; caro alba (1–2''' crs.) stupposa ; lamellae confertae latiusculae (2''' lt.) ex albo pallescentes acie integrae nunquam anastomosantes.

C) *Nitens* (sub n. 1642). Pilei resupinati orbiculares v. dimidiato-reflexi flabellati (10–40''' dm.) superne densiuscule concentrice zonati adpressissime velutini, sericeo-nitentes, unicolores sordide cinerascentes, margine integri acuti ; caro tenuis (0.5''' crs.) alba stupposa ; lamellae confertae latiusculae (1–2''' lt.) ex albo pallescentes, postice non anastomostantes.

D) *Dichroa* (sub n. 1613). Pilei horizontales dimidiati v. flabellati postice truncati v. cuneati (30–50''' dm. trs. × 30-40''' dm. ant.-post.) superne hispido-velutini pallescentes densiuscule concentrice zonati, ambitu zonis rufescentibus ornati, margine acuti repandi ; caro alba (2-2,5''' crs.) stupposa ; lamellae confertae membranaceo-

rigidulae latiusculae (2-2,5''' lt.) acie integrae v. denticulatae, saepius furcatae atque postice plus minusve reticulato-anastomosantes.

E) *Fuscescens* (sine n.). Pilei horizontales, dimidiati, postice truncato subreniformes (30-40 dm. trs. × 20-25''' dm. ant.-post.), superne hispidulo-velutini dense concentrice zonati, zonis nonnullis depressis vix puberulis opacis nonnullis aliis tumidis elevatis hispidissimis, pallide rufescentes, margine acuti integri; caro fuscescens v. pallide subcinereo-fulva (0,5-1''' crs.) subsuberosa; lamellae confertae crassiuscule membranaceae, acie obtusiusculae integrae, densiuscule furcatae, postice non v. vix reticulato-anastomosantes, leniter e pallescenti subcervinae. An species distincta?

56. Schizophyllum commune Fr. — Sacc., l. c. p. 635.
Hab. Vulgatissimus ad palos truncosque vetustos prope *Apiahy*, per ann. 1881-88 (sub n. 1485, 1486, 1622).

57. Clitopilus glabellus Speg. (n. sp.)
Diag. Pileus carnosus mollis, plano-depressus saepius excentricus laevis glaber pallide e roseo-testaceus; stipes solidus elongatus albus farinosulus utrinque subincrassatus; lamellae decurrentes confertae strictae albo-roseae; sporae ovoideae e hyalino roseae, laeves.
Hab. Ad terram inter folia dejecta putrescentia in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2912).
Obs. Pileus primo regularis hemisphaericus non v. vix subumbilicatus dein explanato-expansus (20-30''' dm.) excentricus medio plus minusve depressus margine integer semper involutus, carnosulus mollis e roseo testaceus glaber laevis (sub jove pluvio viscidulus?); lamellae tenui membranaceae, confertae, strictiusculae (1-2''' lt.), acie integerrimae acutae, polymacriae, utrinque attenuatae,

postice breviter decurrentes; stipes erectus rectus teres (30–50''' lg. × 3–5''' crs.) utrinque saepius leniter incrassatus carnosus albus farinosulus v. minutissime subfurfuraceo-squamulosus, farctus; sporae ovoideae (6-8 × 4-5 μ) inaequilaterales, grosse 1-guttulatae, laeves hyalino-roseae v. perdilute subferrugineae. Species *C. angustato* Prs. affinis sed satis distinctus.

58. Nolanea conoidea Speg. (n. sp.)

Diag. Pileus conoideo-expansus acute umbonatus membranaceus hygrophanus, aquose cinnamomeus glaber laevis margine rectus acutus non v. vix substriatus; stipes rectus tenuis fuscus basi mycelio albo instructus; lamellae remotiusculae latiusculae subliberae margine pilei attingentes; sporae irregulares, grosse denseque gibboso-nodulosae e hyalino subferrugineae.

Hab. Ad terram sabulosam muscosam sub dumetis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus primo ovoideus dein conoideo-expansus (20–25''' dm.) centro minute acuteque umbonatus tenui membranaceus udus hygrophanus subcinnamomeus, in sicco opacus olivascenti-testaceus glaber laevis vix margine minute laxe obsoleteque striatulus; stipes teres erectus (25-30''' lg. × 2''' crs.) rectus tenuis, fistulosus tenacellus fuscus laevis glaber, basi mycelio parcissimo albicante instructus; lamellae subremotae latiusculae (2''' lt.) tenuimembranaceae acie integrae, antice acutatae postice attenuato-rotundatae, pileo concolores v. pallidiores; sporae elongatae (10–12 × 6 μ) grosse denseque gibboso-nodulosae, grosse 1-guttulatae e hyalino pallidissime subferrugineae. Species pulchella *N. conica* Pk. certe peraffinis, sed ut videtur satis distincta.

59. Eccilia fusco-rufescens Speg. (n. sp.)

Diag. Pileus subhemisphaericus umbilicatus glaber laevis,

margine obsolete substriatus fusco-rufescens; lamellae tenuissimae confertae latissimae, adnato-decurrentes pileo pallidiores; stipes elongatus gracilis laevis glaber antice fulvus postice badio-fuscus; sporae subellipsoideae, anguloso-gibbosae, e hyalino subferrugineae.

Hab. Ad stipites *Filicum* putrescentes in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus primo subglobosus dein hemisphaericus (10–20''' dm) semper plus minusve profunde umbilicatus laevis glaber vix margine integro dense minute obsoleteque striatus (an etiam in vivo?), in juventute fulvo-rufescens dein, ambitu praecipue, rufescenti-fuscus; lamellae subtriangulares, confertae postice late (2-3''' lt.) adnato-decurrentes, antice attenuato-acutatae, tenuissime membranaceae acie integerrimae pallescenti-fulvae; stipes erectus rectus teres gracilis (40-70''' lg. × 1–2''' crs.) tenacellus rigidulus tenuiter e cavo farctus laevis glaber non v. vix subnitens, sub pileo subfulvescens caeterum fusco-badius v. subtestaceus, basi insititius, mycelio fere nullo; sporae ovoideae v. subellipticae (10-12 × 6–8 μ), grosse 5–6-angulato-nodulosae, grosse 1-guttulatae e hyalino perdilute ferruginascentes. Species *E. griseo-rubella* Lasch. plurimis notis accedens, satis tamen abhorrens.

60. Claudopus variabilis Prs. — Sacc., l. c. p. 733.

Hab. Ad truncos ramosque emortuos in sylvis prope *Apiahy*, Maj. 1888 (sine n.).

Obs. Pileus 5–15''' dm. tenuiter carnosulus furfurellus; stipes minutus incurvus velutinus; lamellae pallide e fusco olivascentes; sporae ovoideae (6–7 × 3–4 μ) pallidissime e rubiginoso olivascentes.

61. Claudopus subvariabilis Speg. (n. sp.)

Diag. Pileus orbiculari-subcordatus carnosus convexo-planus, glaber laevis testaceo-fulvescens; lamellae sub-

confertae latiusculae olivascenti-badiae; stipes minutus incurvus pileo pallidior glaber; sporae ellipsoideae laeves pallidissime olivascentes.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1880 (sub n. 1640).

Obs. Solitarius v. hinc inde laxe gregarius; pileus horizontalis ex orbiculari subcordatus v. rarius subdimidiatus (5–20''' dm.), postice plus minusve stricte marginatus, e convexulo applanatus, non v. vix deorsum depressulus, laevissimus glaberrimus margine rectus acutus integer, pallide testaceus v. badio-fulvescens; caro crassiuscula (0,5-1''' crs.) alba compacta, in sicco rigidula ad marginem usque producta; lamellae subconfertae membranaceae rigidulae pro ratione sublatiusculae (0,5-1''' lt.) lineares, polymacriae, antice acute attenuatae, postice truncato-adnatae, non v. vix denticulo minutissimo decurrentes, primo pallescentes, dein fulvae, postremo fusco-olivascentes, margine integerrimae pallidiores; stipes excentricus minutus (3–5''' lg. $\times$ 0,5–1''' crs.) abrupte incurvus, teres, pileo pallidior glaber laevis, vix basi mycelio parcissimo albo instructus; sporae ex ovoideo ellipsoideae (6–7 $\times$ 4–5 μ) laeves, grosse 1-guttulatae, chlorinae.

PHOLIOTELLA Speg. (n. gen.)

Char. Stipes annulatus carnosus ab hymeniophoro discretus; lamellae sinuato-v. truncato-adnatae, sponte non secedentes. Sporae ferruginae.

Genus *Pholiotis* simillimus vix stipite discreto recedens.

62. PHOLIOTELLA BLATTARIOPSIS Speg. (n. sp.)

Diag. Pileus carnosus convexo-umbonatus glaber laevis subferrugineus; stipes subfistulosus teres crassiusculus laevis pileo pallidior albo-anulatus; lamellae rotundato-adnatae latiusculae confertiusculae sordide fusco-ferrugineae; sporae ovoideo-subglobosae laeves ferrugineae.

Hab. Ad terram in pratis pinguibus prope *Apiahy*, Aug. 1881 (sub n. 1535).

Obs. Solitarius; pileus carnosus primo e globoso ovatus dein hemisphaerico-expansus (15-20''' dm.) centro crasse obtuseque umbonatus, glaber laevis, margine integer incurvulus, non striatus, e fusco v. ferrugineo rufescens (in sicco testaceus); caro alba compactiuscula sub umbone evoluta super lamellas gradatim marginem versus evanescens; stipes carnosus erectus rectus v. vix flexuosulus, teres (35-40''' lg. × 3-4''' crs.) facillime a pileo secedens glaber laevis, fistulosus, superne ferrugineus deorsum sensim incrassatus pallescens basi saepius albo-pulverulentus, sub pileo anulo descendente parvulo crassiuscule membranaceo albo integro persistente ornatus; lamellae polymacriae confertiusculae latae (3''' lt.) antice obtuse acutatae postice attenuato-rotundatae, longiores attenuato-adnatae, acie integrae sordide e fusco ferrugineae; sporae e sphaeroideo ovatae (9-10 × 8-9 μ) laeves ferrugineae. Species pulchella *Ph. blattariae* Fr. habitu accedens, mox tamen dignoscenda.

63. Pholiota Puiggarii Speg. (n. sp.)

Diag. Humigena, phaeota; pileus tenui carnosus convexo-planus laevis glabler e lutescente testaceus; stipes subfistulosus basi subincrassatus laevis, pileo pallidior, anulo albo majusculo superne praeditus; lamellae confertae postice attenuato-adnatae non v. vix subdecurrentes fusco-ferrugineae; sporae ellipsoideae laeves fusco-ferrugineae.

Hab. Vulgata in pratis graminosis prope *Apiahy*, Aut. 1881-88 (sub n. 2876).

Obs. Solitaria v. hinc inde laxe gregaria; pileus e convexo planus (30-50''' dm.) centro non v. vix depressus, nunquam umbonatus, carnosulus, mollis glaberrimus v. vix in prima aetate laxissime minutissimeque pulverulentus,

sub jove pluvio viscidulus, laevissimus (in sicco minute concentriceque rugulosus ac obsolete laxe radiatim substriatulus), primo lutescenti-fulvus dein fulvescenti-badius v. lutescenti-testaceus non v. vix subnitens; caro alba crassiuscula (2–4‴ crs.) compactiuscula subexucca fere ad marginem pilei usque producta; stipes subfistulosus erectus rectus teres (60–100‴ lg. × 4‴ crs.) albescenti-fulvus glaber laevis, deorsum sensim incrassatulus atque basi subbulbosulus (10‴ crs.) ibique mycelio laxe crassiusculeque fibroso-ramuloso candido strigose ornatus, ad partem superam, sub pileo, anulo descendente membranaceo amplo (8–12‴ dm.) integro candido persistente cinctus; lamellae membranaceae confertae lineares sublatiusculae (3‴ lt.) polymacriae, utrinque attenuatae, postice apicem stipitis attingentes, longiores non v. vix denticulo decurrentes, acie integerrimae primo fulvescentes dein obscure fusco-ferrugineae v. sordide cinnamomeae; sporae ex ovoideo ellipticae (10-14 × 6-9 μ) inaequilaterales eguttulatae, laeves, pulchre obscureque ferrugineae. Species vulgata nobilis *Ph. togulari* Bull. (in juventute) et *Ph. sphaleromorphae* Bull. (per aetatem) affinis, *Ph. praecoci* Prs. praecipue cognata, sed ab omnibus tamen satis, ut videtur, distincta.

64. Pholiota impudica Speg. (n. sp.)

Diag. Truncigena, aegeritina, coespitosa; pileus tenui carnosus convexus obtuse umbonatus laevis siccus glaber e fulvescente badius; stipes subflexuosus farctus minute adpresseque squarruloso-fibrillosus, pileo concolor, anulo amplo coriacello albo-pallescente cinctus; lamellae membranaceae lineares confertae utrinque attenuatae postice adnatae sordide fulvescentes; sporae ellipsoideae laeves rubiginosae.

Hab. Ad truncos vetustos muscosos in sylvis propre *Apiahy*, Maj. 1888 (sub n. 2913).

Obs. 3–5–coespitosa, rarius subsolitaria; pileus primo ex ovato hemisphaericus plus minusve subacute umbonatus margine subinvolutus saepeque pulverulento-fibrillosus, dein convexo-explanatus (10–25''' dm.) obtuse obsoleteque umbonatus margine rectus integer e fulvo badius v. testaceus, centro obscurior, laevissimus glaberrimus; caro tenuis alba (0,5–1''' crs.) subexsucca; stipes incurvo-adscendens flexuosulus teres (50–60''' lg. × 3–5''' crs.) deorsum sensim incrassatulus, basi adnato-subfasciculatus, superne pileo pallidior, deorsum concolor v. obscurior, firmus, dense minute adpresseque fibrilloso-squarrulosus per aetatem saepius glabratus ac subsericeus farctus tenacellus; anulus apice stipitis ac margine pilei adnatus amplus crassiuscule membranaceus tenacellus persistens, per aetatem irregulariter disruptus stipite v. pileo frustulatim adhaerens, primo albus dein sordide pallescens (in sicco subfloccculosus); lamellae lineares (1–2''' lt.) utrinque attenuatae, postice apice stipitis truncato-adnatae, tenui membranaceae polymacriae, acie integerrimae, primo albo-pallescentes dein sordide fulvescenti-rufae; sporae ex ovoideo ellipticae (10 × 5 μ) inaequilaterales laeves non v. minute 1-pluriguttulatae, pallide fulvo-rufescentes v. rubiginosae. Species *Ph. pudicae* Fr. affinis, satis riteque tamen distincta.

65. Pholiota leptopoda Speg. (n. sp.)

Diag. Muscigena; pileus hemisphaericus carnosulus, non v. vix papillulato-umbonatulus, glaber laevis e pallescente rufus; lamellae sinuato-adnatae latiusculae ferrugineae; stipes elongatus gracilis glaber laevis rufescens anulo parvulo lacero remoto ornatus; sporae ellipsoideae laeves ferrugineae.

Hab. In sylvis ad terram muscosam graminosam prope *Apiahy*, Jun. 1881 (sub n. 1533).

Obs. Pileus carnosulus hygrophanus primo subglobosus dein

hemisphaerico-expansus (10-15''' dm.) centro non v. minute papillutato-umbonatus, in juventute glaber laevis e pallescente lutescens, per aetatem obsolete laxeque striatus fusco-rufescens; caro tenuis aquosa (0,5-1''' crs.) alba; lamellae polymacriae membranaceae latiusculae (1-2''' lt.) confertiusculae acie integrae antice acutae postice sinuato-adnatae ferrugineae; stipes erectus rectus gracilis (40-80''' lg. $\times$ 1-2''' crs.) tener fistulosus hygrophanus glaber laevis sursum attenuatus albescens, deorsum sensim leniterque incrassatus fusco-rufescens, ad tertium superum anulo minuto submembranaceo lacero sordide albo ornatus; sporae ex ovoideo ellipsoideae (10 $\times$ 7 μ) leniter inaequilaterales eguttulatae laeves intense fusco-ferrugineae. Species elegans gracilis tenella *Ph. mycenoidi* Pk. cognata.

66. Pholiota imperialis Speg. (n. sp.)

Diag. Pileus carnoso-convexus centro obscure ferrugineus, ambitu croceo-rufescens glaber laevis; stipes adscendens obclavatus incurvulus e luteo cinnamomeus fistulosus laevis glaber, apice anulo crasso subcoriaceo concolore ornatus, basi mycelio crasso citrinus donatus; lamellae membranaceae confertae latae adnatae primo fulvae dein pulchre ferrugineo-cinnamomeae; sporae subellipsoideae laxe rugulosae intense ferrugineae.

Hab. Ad truncos vetustos cariosos in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus primo e globoso subhemisphaericus laevissimus glaberrimus dein convexo-explanatus (50-100''' dm.) centro non v. vix depressus, margine rectus integer v. subrevolutus atque fissus glaber v. minute adpresse laxissimeque fibrilloso-squamulosus, medio obscure fusco-ferrugineus, ambitu gradatim pallidior ac perpulchre ex aurantio ferrugineus v. cinnamomeo-subcroceus subsericeo-nitens; caro crassa (8-10''' crs.) ex albo flavescens

compacta succosa subtenacella; stipes adscendens teres (100-120‴ lg. × 10-20‴ crs.) deorsum incrassatus atque incurvus e cinnamomeo ferrugineus rigidus tenax (in sicco!) glaber laevis basi mycelio substuppeo matricem penetrante intense citrino ornatus, apice vivide aurantio-lutescens, anulo descendente crassiusculo tenacello (20‴ dm.) concolore cinctus; lamellae membranaceae latae (10-12‴ lt.) confertae polymacriae acie integrae, antice attenuato-acutatae, postice adnato-truncatae, primo fulvae dein obscure ferrugineae, pulvere fulvo-cinnamomeo adspersae; sporae e globoso v. ovoideo ellipsoideae (8-9 × 7-8 μ) pulchre ferrugineae obsolete laxeque rugulosae. Species vere mirabilis distinctissima.

67. Flammula peregrina Fr. — Sacc., l. c. f. 814.

Hab. Ad truncos emortuos dejectos prope *Apiahy*, Aut. 1881 (sub n. 1543).

Obs. Pileus applanatus (20-25‴ dm.) laevis glaber e fulvescente ferrugineus, carnosulus; stipes incurvus (10-20‴ lg. × 4-6‴ crs.) farctus concolor; lamellae latiusculae (2-3‴ lt.) confertiusculae fulvo-ferrugineae; sporae ovoideae (8-10 × 5 μ) laeves eguttulatae fulvo-ferrugineae.

68. Flammula sordida Speg. (n. sp.)

Diag. Gymnota, terrestris; pileus applanatus centro depresso-umbonatus, margine involutus laevis glaber sordide pallideque badius; lamellae lineares confertiusculae, adnato-decurrentes fusco-ferrugineae; stipes erectus rectus teres e farcto fistulosus, superne pallescens laevis, centro pileo concolor glaber, deorsum albescens pulverulentus; sporae ovoideae laeves fusco-ferrugineae.

Hab. Ad terram graminosam pinguem in umbrosis prope *Apiahy*, Aut. 1881 (sine n.).

Obs. Solitaria; pileus primo ovoideus dein explanato-ex-

pansus (15–20''' dm.) centro depressulus umboneque plus minusve evoluto donatus margine incurvulus (in juventute involutus) laevis glaber non v. vix obsoletissime substriatus, pallide sordideque badius v. subtestaceus, tenuiter carnosulus; caro tenuis (2-3''' crs.) alba subexsucca; lamellae membranaceae confertiusculae mediocres (1,5-2''' lt.), utrinque attenuatae, postice plus minusve decurrentes acie integrae sordide fusco-ferrugineae; stipes erectus teres (60''' lg. × 3''' crs.) superne pallescens laevis, medio pileo concolor glaber deorsum albescens pruinula alba vestitus, non v. leniter incrassatus, mycelio albo-fibroso dense intertexto ac terram arcte adglutinante radicatus; sporae ovoideae (10 × 6-7 μ) inaequilaterales, laeves eguttulatae, sordide obscureque ferrugineae.

69. Flammula Puiggarii Speg. (n. sp.)

Diag. Lubrica, terrestris; pileus carnosus applanato convexulus, subinvolutus laevis viscidulus fulvo-testaceus; lamellae membranaceae confertiusculae adnatae obscure fusco-fuligineae; stipes elongatus sub pileo abrupte incurvus utrinque incrassatus, pileo concolor, glaber laevis; sporae ovoideae laeves fuligineo-ferrugineae.

Hab. Ad terram humosam v. detrita lignea putrescentia in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1529).

Obs. Solitaria; pileus subhemisphaerico-explanatus (80-100''' dm.) margine primo involutus dein incurvulus tantum, centro non depressus nec umbonatus, laevis glaber, cute facile separabili viscidula, in sicco papillis minutissimis albo-cinerascentibus laxissime adspersa, hinc inde rimulosa tectus, ferrugineus v. fulvescenti-testaceus, centro obscurior ambitu saepius pallidior; caro alba crassa (10''' crs.) marginem pilei usque producta; lamellae polymacriae membranaceae confertiusculae latiusculae (4-5''' lt.), acie integerrimae, antice attenuato-acutatae, postice subattenuato-truncatae, adnatae non v. vix denti-

culo decurrentes, primo ferrugineae dein obscure fusco-fuligineae; stipes horizontalis teres elongatus sub pileo abrupte verticaliter incurvus (80–100''' lg. × 6–8''' crs.) farctus utrinque incrassatulus (10-15''' crs.), glaber laevis, pileo concolor, deorsum pallescens, basi saepius albo-pruinulosus; sporae ovoideae (11-12 × 8–9 μ) inaequilaterales laeves eguttulatae e ferrugineo fuligineae. Species perpulchra magna carnosa distinctissima.

70. Flammula brasiliensis Fr. — Sacc., l. c. f. 814.

Hab. Ad truncos nec non ad terram pinguem ramentaceam in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2863–2896 b.).

Obs. Solitaria v. saepius coespitosa; pileus convexulus centro planus v. plus minusve depressulus (15-30''' dm.) tenuiter carnosulus laevis glaber sulfureus; caro lutea (1–1,5''' crs.) subexsucca; lamellae polymacriae confertiusculae membranaceae substrictiusculae (1,5–2''' lt.) antice attenuatae postice attenuato-truncatae adnataeque, acie integerrimae, primo citrinae dein fulvo-cinnamomeae v. vivide ferrugineae, postremo sordide obscureque fusco-fuligineae; stipes plus minusve evolutus (40–50''' lg. × 1,5–3''' crs.) erectus, rectus v. flexuosulus saepeque subtortus, laevis glaber sursum teres, pileo concolor deorsum leniter incrassatulus fulvescens v. subfulvescens; sporae ovoideae (8-10 × 4-5 μ) inaequilaterales pulchre intenseque ferrugineae.

71. Flammula bicolor Speg. (n. sp.)

Diag. Pileus carnosulus planiusculus laevis fulvo-ochraceus; stipes gracilis subfistulosus rigidus durus pileo concolor laevis glaber; lamellae confertae membranaceae adnatae, primo citrinae dein pileo concolores; sporae ovoideae laeves fulvo-ferrugineae.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2894–95).

Obs. Coespitosa, rarius solitaria; pileus carnosulus primo hemisphaericus laxe minuteque subsquamuloso-pulverulentus, dein convexo-expansus (20-40‴ dm.) centro saepius plus minusve umbilicatus glaber laevis vix margine obsolete striatulus, semper pulchre intenseque e fulvo v. rufo ochraceus; caro subtenuis (1-2‴ crs.), medio tantum bene evoluta compactiuscula, pallide citrina; lamellae polymacriae membranaceae latiusculae (2-3‴ lt.) confertae acie integerrimae, antice acutato-attenuatae, postice truncatae v. subsinuatae stipiteque adnatae, primo citrinae dein fulvescentes postremo rufo-ferrugineae; stipes erectus rectus v. vix flexuosulus tenuiter fistulosus, teres (15-40‴ lg. × 1-2,5‴ crs.), in juventute mollis, per aetatem rigidus fere lignosus, basi non v. vix incrassatus, pileo concolor, laevis glaber; sporae ovoideae (8-9 × 4 μ) inaequilaterales, grosse 1-guttulatae, laeves, pulchre pallideque fulvo-ferrugineae. Species priori peraffinis; an ejusdem tantum varietas?

72. Flammula sapinea Fr. — Sacc., l. c. f. 824.

Hab. Ad truncos emortuos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1492).

Obs. Pileus convexo-explanatus (30-50‴ dm.) centro opacus subochraceus, ambitu radiatim rimulosus aureo-flavescens subnitens; stipes rectus v. incurvulus, adscendens pallide fulvescens v. rufescens glaber laevis teres (35-40‴ lg. × 2-3‴ crs.) farctus, vix deorsum incrassatulus (4-5‴ crs.) ac subfistulosus; lamellae membranaceae confertiusculae polymacriae latiusculae (2-3‴ lt.), antice attenuato-acutatae, postice leniter attenuatae atque truncato-adnatae, primo pallide fulvescentes dein ferrugineae; sporae ex ovoideo ellipsoideae (7-8 × 4-5 μ) subinaequilaterales, laeves, obtusae e fulvo ferrugineae. Forma brasiliensis elegantissima a typo pileo minus carnoso nonnihil recedens.

73. Flammula palmarum Speg. (n. sp.)

Diag. Pileus carnosulus convexulus fulvo-lateritius glaber laevis; lamellae membranaceae latiusculae confertae adnatae ferrugineae; stipes erectus mollis subfistulosus gracilis pileo pallidior, glaber laevis; sporae ovoideae laeves fulvo-ferrugineae.

Hab. Ad truncos palmarum in campis prope *Apiahy,* Aut. 1881 (sub n. 1623).

Obs. Pileus primo hemisphaericus dein convexo-explanatus (10-30‴ dm.) centro non v. parce depressus tenuiter carnosulus margine integer incurvulus glaber laevis, primo fulvus dein e fulvo lateritius v. ferrugineus; caro tenuis (0,5-1,5‴ crs.) vix fere centro tantum evoluta e lutescente alba; lamellae membranaceae polymacriae, acie integrae confertae ferrugineae, antice arcuato-attenuatae, postice truncato-adnatae, latiusculae (3-3,5‴ lt.); stipes erectus rectus v. subflexuosulus teres gracilis (30-40‴ lg. × 1,5-2‴ crs.) mollis, superne fulvus, caeterum pileo concolor v. vix pallidior, laevis glaber, utrinque non v. vix incrassatulus, basi matricem bulbosule (2,5-3‴ crs.) penetrans subfistulosus; sporae ellipsoideo-ovoideae (8-10 × 5-6 μ) antice acutae postice obtusae leniter inaequilaterales, eguttulatae pulchre fulvo-cinnamomeae.

74. Flammula spumosa Fr. — Sacc., l. c. f. 817.

Hab. Ad terram circa caudices putrescentes muscosos in sylvis prope *Apiahy*, Aut. 1888 (sine n.).

Obs. Forma brasiliensis sublignatilis a typo nonnihil recedens; pileus tenuiter carnosulus ex hemisphaerico applanatus (15-20‴ diam.) non v. vix umbonatulus, margine subinvolutus integer e fulvo subaurantius; caro e luteo citrina; stipes elongatus flexuosulus (30-35‴ lg. × 2-3‴ crs.) fibrillosus e flavescente ferrugineus; lamellae adnatae confertae, primo luteae dein vivide ferrugineae;

sporae ellipsoideae (8-10 × 5-5,5 μ) laeves eguttulatae flavo-rubiginosae.

75. Flammula? flavipunctata Speg. (n. sp.)

Diag. Sapinea; pileus tenuiter carnosulus convexo-planus subaurantius minute adpresseque fusco-maculatus v. subsquamulosus; stipes tenax rigidus glaber laevis pileo pallidior; lamellae confertae latissimae ferrugineo-aurantiae minutissime denseque luteo-punctulatae; sporae ellipsoideae aurantio-ferrugineae.

Hab. Ad truncos languidos in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Solitaria; pileus tenuiter carnosus rigidulus e convexo applanatus (15-20‴ dm.) centro non v. vix depressulus margine obtusulus integer v. repandulus medio pallide e ferrugineo aurantiacus, maculis v. squamulis adpressis minutis fuscescentibus variegatus, ambitu lutescens glaber laevis; caro tenuis (0,5‴ crs.) compactiuscula ex albo lutescens; stipes erectus rectus v. incurvulus teres (20-25‴ lg. × 2‴ crs.) utrinque non v. leniter incrassatulus rigidulus tenax glaber laevis, pallide e fulvo ferrugineus v. fulvus, farctus; lamellae membranaceae pro ratione latissimae (3-4‴ lt.) confertae, polymacriae, antice attenuatae postice subsinuato-adnatae, acie integrae, primo luteae dein pulchre aurantio-ferrugineae, punctis densis minutissimis (sub lente fere tantum perspicuis) luteis donatae; sporae ellipsoideae (9-10 × 5 μ) leniter inaequilaterales non v. minute 1-3-guttulatae laeves ferrugineo-aurantiae (fulvo aurantiae sub microscopio!). Species stipite sublignoso (in sicco) lamellisque subsinuatis ad *Naucorias* satis vergens et facile *Naucoriae marasmioidi* Pk. proxima!

76. Naucoria pygmea Bull.? — Sacc., l. c. f. 833.

Hab. Ad basin truncorum in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. A typo recedit pileo subumbonato margine fere extrio stipiteque pallescenti-fulvescentibus; sporae ellipsoideae (6-8 × 4-5 μ) laeves fulvo-olivascentes. Specimina satis manca et tandem nonnihil dubiosa!

76. Naucoria? rigidipes Speg. (n. sp.)

Diag. Pileus hemisphaericus ligneo-pallescens laevis glaber margine inflexus squamulis albis laxis secedentibus ornatus; lamellae latae subtriangulares subconfertae subsinuato-adnatae rufescenti-ferrugineae; stipes erectus teres ligneo-pallescens ligneo-rigidus glaber medio obsolete striatus basi araneoso-gossypinus; sporae ellipsoideae laeves pallide ferrugineae.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2872).

Obs. Solitarius; pileus marasmioideo-rigidulus primo subglobosus margine minute albo-appendiculatus, dein hemisphaerico-expansus (15‴ lt.), glaber (an viscosus?) laevis pallidissime fulvus v. lignicolor, margine subincurvulus integer frustulis squamuliformibus albis (veli vestigiis?) laxe ornatus; caro tenuis (0,5-1‴ crs.) pallescens exsucca; lamellae membranaceae subconfertae pro ratione latissimae (3‴ lt.) polymacriae subtriangulares, postice rotundato-truncatae adnataeque, acie integerrimae, primo rufescentes dein pallide ferrugineae; stipes erectus flexuosulus teres (40-50‴ lg. × 1,5-2‴ crs.), tenax rigidus sublignosus, tubulosus, cavitate pulpa facile separabili alba spongiosa farctus, pileo concolor v. vix pallidior, utrinque leniter incrassatulus summo apice laevis, medio obsolete striatus, basi subinsititius, mycelio albo laxe tenuissimeque araneoso-gossypino vestitus; sporae ellipsoideae (13-14 × 9-10 μ) non v. vix inaequilaterales laeves eguttulatae rufescentes v. pallide fuligineae. Species pulcherrima habitu *Strophariae merdariae* Fr. simillima sed magis rigida ac lamellis sporisque ferrugineis distincta.

77. Naucoria ? echinosperma Speg. (n. sp.)

Diag. Lepidota: pileus convexo-umbonatulus e cervino subferrugineus laevis farinosulus; lamellae ventricosulae adnatae saepeque denticulo decurrentes lateritio-ferruginеae; stipes elongatus teres fistulosus pallescens laevis glaber; sporae globosae echinulatae ferrugineae.

Hab. Ad terram humosam detritis ligneis immixtam in sylvis prope *Apiahy*, Oct. 1888 (sub n. 2918).

Obs. Pileus membranaceo-carnosulus primo subovatus dein convexo-applanatus (25''' dm.) centro umbonatulus obscurior, margine acutus subincurvus integer v. minute fissus e cervino testaceus v. subferrugineus laxe minutissimeque subcanescenti-pulverulentus laevis v. (an in sicco tantum?) radiatim subimperspicue fibrilloso-striatus; lamellae membranaceae subconfertae latae (2,5-3''' lt.) polymacriae, antice acutato-rotundatae, postice breviores attenuato-subsinuatae, longiores subtruncato-adnatae saepeque denticulo breviter decurrentes, acie integerrimae, intense obscureque ferrugineae; stipes cartilagineo-carnosulus fistulosus erectus rectus tenuis (40-45''' lg. × 2-3''' crs.) deorsum leniter incrassatus glaber laevis, vix (in sicco tantum?) obsolete longitudinaliterque fibrilloso-striatus, pileo pallidior, basi mycelio albo-gossypinulo radicatus; sporae globosae (8 μ) grosse 1-guttulatae, dense minuteque papilluloso-asperulae intense pulchreque ferrugineae. Species inter *Flammulas* et *Naucorias* media; an *N. echinospora* (auct.? Sacc., l. c. f. 859) identica?

78. Naucoria apiahyensis Speg. (n. sp.)

Diag. Pileus e globoso hemisphaericus glaber laevis ferrugineus; lamellae sinuato-adnatae sordide fusco-ferruginеae; stipes tenacellus striatus pallescens; sporae ovoideae, rugosae, ferrugineae.

Hab. Ad terram in pratis inter gramina prope *Apiahy*, Apr. 1888 (sub n. 2874).

Obs. Pileus subcarnosulus primo hemisphaerico-globosus, dein explanato-expansus (15-20‴ dm.), margine tenuis subinvolutus integer, laevis glaber sordide obscureque ferrugineus; caro tenuis arida albescenti-rufescens; lamellae membranaceae sublatiusculae (1,5-2‴ lt.) confertae, polymacriae antice attenuato-acutatae, postice rotundato-adnatae, acie integerrimae, sordide obscureque fusco-ferrugineae; stipes teres erectus rectus (25-30‴ lg. × 1-2‴ crs.) tenacellus fistulosus, superne pallescens deorsum fuscescenti-ferrugineus, dense grosseque longitudinaliter striatus; sporae ovatae v. ellipsoideae (13-15 × 8-10 μ) leniter inaequilaterales, eguttulatae, dense grosseque rugulosae, pulchre atque intense ferrugineae. Species pulcherrima a multis proximis sporis rugosis mox dignoscenda.

79. Naucoria pusillima Speg. (n. sp.)

Diag. Pileus e convexo planus margine inflexulus e rufescente badius laevis glaber; stipes teres deorsum leniter incrassatus subfarctus pileo concolor laevis glaber; lamellae confertiusculae lineares adnatae e rufo ferrugineae; sporae ellipsoideae rugulosae lutescenti-ferrugineae.

Hab. Ad terram inter muscos in umbrosis propre *Apiahy*, Apr. 1888 (sin n.).

Obs. Solitaria; pileus subcarnosulus primo hemisphaericus dein convexo-explanatus (3-5‴ lt.) centro non v. parce depressus, margine saepius inflexulus e rufescente badius v. pallide ferrugineo-testaceus, ambitu pallidior laevis glaber; lamellae lineares membranaceae confertiusculae acie integrae, polymacriae, antice acutatae postice subrotundatae v. truncato adnatae, primo rufescentes dein ferrugineae; stipes erectus rectus teres (10‴ lg. × 0,5-1‴ crs.) deorsum sensim incrassatus laevis glaber superne pallescens inferne pileo concolor v. obscurior; sporae el-

lipsoideae (8-9 × 5 μ) utrinque plus minusve acutatae leniter inaequilaterales non v. 1-guttulatae, minutissime denseque rugulosae e fulvo flavescenti-ferrugineae. Species vere pusilla rigidula, in sicco saepius tota intense nigrescens.

80. Galera macrorhina Speg. (n. sp.)

Diag. Pileus convexo-explanatus, umbone conoideo elongato acutiusculo donatus, striato-subsulcatus, rufescenti-lateritius; lamellae lineares sinuato-adnatae ferrugineae; stipes teres pileo concolor laevis; sporae ellipsoideae rugulosae ferrugineae.

Hab. Ad ramenta dejecta putrescentia in uliginosis prope *Apiahy*, Aut. 1880 (sub n. 1570).

Obs. Pileus carnosulo-membranaceus primo acute subpyriformis dein convexo-explanatus (5-10''' dm.) centro papilla pro ratione longissima acutiuscula ornatus, ambitu grosse subdenseque striato-sulcatus, margine recto integro v. erosulo-fisso, subcoccineus subpulverulentus dein glaber rufescenti-lateritius in umbone obscurior; caro vix centro evoluta aquosula albo-flavescens; lamellae lineares (0,5-0,7''' lt.) membranaceae subconfertiusculae acie integrae utrinque attenuatae postice subtruncato-rotundatae; stipes erectus teres (10''' lg. × 1''' crs.) laevis glaber, pileo concolor utrinque non v. leniter incrassatus basi insititius; sporae ellipsoideo-ovatae (10 × 5 μ) subinaequilaterales, eguttulatae minutissime subimperspicueque rugulosae e ferrugineo fulvo-cinnamomeae.

81. Galera rubiginosa Prs. — Sacc., l. c. f. 868.

Hab. In herbosis nemorosis prope *Apiahy*, Aut. 1881 (sine n.).

Obs. Pileus campanulatus (10''' alt. × 10''' dm.) membranaceus, sulcato-striatus, hygrophanus, rufescenti-cervi-

nus ; lamellae adscendentes sublineares utrinque attenuatae, postice truncato-adnatae (1-1,5''' lt.) ferrugineae; stipes erectus gracilis (30''' lg. × 1,5''' crs.) laevis glaber, sursum pileo pallidior, deorsum concolor; sporae ellipsoideae (10 × 6-7 μ) laeves eguttulatae rubiginoso-aurantiae.

82. Galera hypnorum Batsch. — Sacc., l. c. f. 868.
Hab. Ad terram humosam muscosam in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2884).
Obs. Specimina, quae mihi adsunt, pusilla ac subobliterata; sporae ellipsoideae (6–9 × 4-5 μ) laeves, pallide fulvo-ferrugineae.

83. Tubaria furfuracea Prs.? — Sacc., l. c. f. 872.
Hab. In sylvis inter gramina et muscos prope *Apiahy*, Maj. 1888 (sub n. 2907).
Obs. Specimen unicum nonnihil mancum typo satis respondens, sed tamen nonnihil dubiosum; sporae ex ovoideo ellipsoideae (8–9 × 4-5 μ) laeves minute pluriguttulatae, pallide ferrugineae.

84. Tubaria heterosticta Fr.? — Sacc., l. c. f. 873 (ut varietas).
Hab. Ad terram pinguem in hortis urbanis, *Apiahy*, Aut. 1881 (sine n.).
Obs. Specimen etiam unicum et nonnihil obliteratum, ergo satis dubiosum; sporae e globoso ellipsoideae v. rarius ovoideae (10-11 × 7–8 μ) laeves eguttulatae, pallide ferrugineae.

85. Agaricus campester L. — Sacc., l. c. f. 997.
Hab. In pratis herbosis subuliginosis prope *Apiahy*, Jun. 1881 (sine n.).

Obs. Sporae subopace fusco-purpureae ellipsoideae (8-9 × 5-7 μ) laeves.

86. Hypholoma piluliforme Bull.? — Sacc., l. c. f. 1040.

Hab. Ad caudices putrescentes muscosos in sylvis prope *Apiahy*, Jun. 1888 (sine n.).

Obs. Specimina nonnihil exsiccatione obliterata sed vix a typo recedere videntur. Coespitosa; pileus subglobosus obtuse obsoleteque umbonatus centro ochraceus ambitu lutescens (5-10‴ dm.); stipes gracilis elongatus (20‴ lg. × 1-1,5‴ crs.) albus laevis glaber; cortina alba fugacissima; lamellae subconfertae lineares postice truncato-adnatae, primo albae dein sordide fusco-olivascentes; sporae ellipsoideae (9-10 × 5 μ) utrinque obtusiuscule acutatae, non v. vix inaequilaterales, obscure e fusco fuligineae.

87. Deconica acutipilea Speg. (n. sp.)

Diag. Pileus e globoso campanulatus acute breveque umbonatus testaceus glaber laevis; lamellae latissimae triangulari-adnatae fusco-atrae; stipes elongatus flexuosus superne badius glaber, inferne pallescens albo-pruinulosus; sporae ellipsoideae laeves fuligineo-purpurascentes.

Hab. Inter folia dejecta putrescentia in sylvis uliginosis prope *Apiahy*, Aut. 1881 (sub n. 1536).

Obs. Pileus primo globosus dein ovatus postremo conoideo-campanulatus (7-10‴ dm.), umbone brevi parvulo acutissimo ornatus, centro fusco-testaceus, ambitu pallidior, laevis glaber; caro vix evoluta subexsucca alba; lamellae membranaceae confertiusculae, polymacriae pro ratione latissimae (3‴ lt.) triangulares, postice sinuato v. saepius truncato-adnatae denticuloque decurrentes, acie integerrimae, fusco-atrae; stipes erectus rectus teres (50‴ lg. × 1,5‴ crs.) flexuosus fistulosus tenacellus rigidulus superne glaber laevis badius, deorsum non v. vix

incrassatulus sensim pallescens ac pruinula alba densa vestitus; sporae ellipsoideae v. ovoideae (10-12 × 6-9 μ), leniter inaequilaterales, utrinque obtusiusculae atque papilla hyalina minutissima auctae, laeves e fusco purpureo-fuligineae. Species pulchella habitu *Paneoli*.

88. Deconica tropicalis Speg. (n. sp.)

Diag. Pileus hemisphaericus acutiuscule minuteque umbonatulus fulvellus glaber laevis; lamellae triangulares latiusculae fusco-nigrae; stipes elongatus superne fulvus glaber, inferne pallescens albo-pruinulosus; sporae ex ovoideo limoniformes laeves fumoso-atrae.

Hab. Ad folia dejecta coacervata putrescentia in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2911).

Obs. Pileus primo hemisphaericus dein convexo-explanatus (5-8''' diam.) umbone parvulo brevi acutiusculo ornatus, centro rufescens, ambitu fulvus laevis glaber; caro vix evoluta compactiuscula alba; lamellae membranaceae confertiusculae, polymacriae, e lineari triangulares latiusculae (1,5''' lt.) postice truncato-adnatae, non v. vix denticulo decurrentes, acie integerrimae, fusco-nigricantes; stipes teres erectus (50''' lg. × 1''' crass.) rectiusculus e farcto cavus tenacellus rigidulus, sursum fulvescens deorsum non v. vix incrassatus e pallescente albus, glaber laevis, basi pruinula alba parca adspersus; sporae ex ovoideo limoniformes (10 × 7 μ) non v. leniter inaequilaterales laeves fumoso-atrae. Species priori peraffinis, lamellis strictioribus atque sporarum forma satis recedens.

89. Psathyra? commiscibilis Brk. — Sacc., l. c. f. 1068.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1531 b).

Obs. Pusilla, coespitosa; pileus subglobosus (5-8''' diam.) pallescens v. rufescens striato-sulcatus hygrophanus;

lamellae membranaceae confertae lineares sordide fuliginéae; stipes breviusculus teres erectus (10–15''' lg. × 1''' crs.) superne pallescens, basi albus subpellucidus, glaber laevis; sporae ellipsoideo-ovoideae (7–10 × 5-6 μ) laeves sordide fuligineae. Species *Psathyriellis* omnibus characteribus externis vergens, sed sporis non atris et tandem *Galeris* accedens.

90. Bolbitius? phascoides Speg. (n. sp.)

Diag. Pileus ovato-conoideus cinereus glaber laevis; lamellae adscendenti-liberae fusco-ferrugineae; stipes erectus gracilis cinereus glaber nitidus; sporae ellipsoideae laeves intense ferrugineae.

Hab. Ad terram uliginosam muscosam sub arbustis prope *Apiahy*, Apr. 1888 (sub n. 2873).

Obs. Pileus ovatus, superne longiuscule acutissimeque conoideus (8–10''' alt. × 5–7''' dm.) cinereus glaber vix margine irregulariter obsoleteque contracto-plicatulus, tenui-membranaceus; lamellae tenues confertiusculae, liberae adscendentes polymacriae acie integrae, primo fulvo-rufescentes dein fusco-ferruginae subfluxiles; stipes teres erectus rectus (50–60''' lg. × 1''' crs.) laevis glaber subnitens pileo concolor v. vix pallidior, ima basi non v. vix incrassatulus atque mycelio parco gossypinulo-albo radicatus; sporae ex ovoideo ellipsoideae (14-16 × 6–8 μ), inaequilaterales laeves fusco-ferrugineae. Species ad hoc genus dubiose relata, pulchella, capsulam *Phasci* cujusdam calyptra adhuc vestitam in mente revocans.

91. Coprinus ephemerus Fr.? — Sacc., l. c. f. 1106.

Hab. Ad terram pinguem stercoratam in hortis prope *Apiahy*, Jan. 1881 (sine n.).

Obs. Specimen nonnihil mancum, ergo dubiosum. Sporae ex ellipsoideo-globosae (10-12 × 7–10 μ), laeves, atro-fuligineae.

92. Coprinus hortensis Mntgn.? — Sacc., l. c. f. 1107.
Hab. Ad terram humosam stercoratam in hortis, *Apiahy*, Aut. 1881 (sine n.).
Obs. Specimen valde obliteratum ac vix determinandum. Sporae e globoso limoniformes (12–14 × 10–13 μ) laeves atrae opacae.

93. Coprinus nycthemerus Fr.? — Sacc., l. c. f. 1100.
Hab. In herbosis uliginosis sylvarum prope *Apiahy*, aut. 1881 (sub n. 1530).
Obs. Specimen exsiccatione obsoletum, typo tamen satis respondens; sporae ovoideo-ellipsoideae (12-14 × 6–8 μ) laeves, atro-fuligineae.

94. Anellaria separata (L.) Krst. — Sacc., l. c. f. 1125.
Hab. In fimo nec non foliis stercoratis putrescentibus in sylvaticis prope *Apiahy*, Apr. 1888 (sub n. 2871).
Obs. Anulus mox evanidus; sporae ellipsoideae (18-20 × 10–14 μ) non v. vix sublimoniformes laeves atrae.

95. Anellaria atramentaria Speg. (n. sp.)
Diag. Pileus carnosus hemisphaerico-umbonatus e livido badius glaber laevis; lamellae confertae sinuato-adnatae atrae; anulus membranaceus persistens lacerus albus; stipes curtus superne fuscescens inferne pallescens incrassatusque; sporae ovoideo-subglobosae laeves atrae.
Hab. Ad terram pinguem v. stercoratam inter folia prope *Apiahy*, Apr. 1888 (sub n. 2871 ?).
Obs. Pileus primo subglobosus dein hemisphaerico-expansus (40''' dm.) plus minusve crasse obtuseque umbonatus carnosulus laevis glaber, centro badius, ambitu lividus, margine acutus subappendiculatus eroso-denticulatus; caro acquoso-flocculosa (1–2''' crs.) alba, centro praecipue evoluta marginem versus gradatim evanescens; lamellae membranaceae confertae, latiusculae (2–3''' lt.)

polymacriae, antice attenuato-acutatae, postice sinuato-adnatae primo fuligineae, dein atrae subdiffluentes, in sicco aterrimae rigidae fragillimae; anulus majusculus (5–8‴ dm.) primo margine pilei adhaerens dein lacero-liber, membranaceus persistens albus; stipes fistulosus erectus superne teres (30‴ lg. × 4–5‴ crs.) non v. vix pruinulosus sordide fuscescens, inferne sensim incrassatus atque basi subbulbosulus (9–11‴ crs.) albus, mycelio albo-fibrilloso radicatus; sporae e globoso-ovatae (5-6 × 4–5 μ) laeves atro-fuligineae. Species priori proxima sed anulo persistente distinctissima, in sicco rigida fragilis fere carbonacea.

96. ANELLARIA ? LEPIOTOIDES Speg. (n. sp.)

Diag. Pileus carnosus ovoideus umbonatus castaneus glaber laevis; lamellae confertae sinuatae ferrugineae atrae albo-marginatae; anulus membranaceus persistens albus; stipes pileo connatus teres apice albus medio fuscescens ac albo-pruinulosus, basi abrupte bulboso-incrassatus; sporae ovoideae laeves atro-fuligineae.

Hab. Ad terram humosam detritis ligneis inmixtam in sylvis prope *Apiahy*, Maj. 1888 (sine n.).

Obs. Pileus primo ovatus dein convexo-expansus (30-40‴ dm.) centro plus minusve crasse obtuseque umbonatus glaber laevis castaneus, margine incurvulus integer; caro crassiuscula (4‴ crs.) alba compactiuscula vix extremo margine evanescens; lamellae membranaceae lineari-arcuatae (2‴ lt.) confertae, antice acutato-attenuatae postice rotundato-adnexae, polymacriae primo ferrugineae dein atro-fuligineae, acie integrae albidae; anulus apicalis amplus (5-8‴ dm.) descendens crassiuscule membranaceus persistens tenacellus albus; stipes erectus rectus (50-60‴ lg.) farctus cum hymeniophoro continuus, sub pileo albus laevis teres (3‴ crs.), medio ex albo fuscescens, pruinulosus v. subimperspicue denseque longitudi-

naliter striatus (an in sicco tantum?), basi abrupte bulboso-incrassatus (15''' crs.), mycelio parco araneoso-gossypinulo terram adglutinante radicatus; sporae ellipsoideae v. ovatae (10 × 6-7 μ) leniter inaequilaterales laeves basi minute apiculatae, primo pellucidae fuligineae dein atrae opacae. Species pulcherrima nobilissima habitu *Lepiotae* cujusdam, *Pholiotis* atque *Stropheriis* nonnihil accedens, ad interim huc adscripta.

97. Psathyrella crenata Lasch. ? — Sacc., l. c. f. 1134.
Hab. Ad terram uliginosam muscosam in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2879).
Obs. Pileus hemisphaericus (10-15''' diam.) minute umbonatus, badius, margine crenatus rufescens; stipes erectus rectus fragilis (60-70''' lg. × 1''' crs.) sordide albescens; sporae ex ovoideo sublimoniformes (12-14 × 9-10 μ) laeves atro-fuligineae opacae. Specimen brasiliense a typo nonnihil deflectens et facile speciem novam sistens, sed nonnihil exsiccatione obliteratum et ad interim huc relatum.

POLYPOREAE Fr.

98. Polyporus tricholoma Mntgn. — Sacc., Syll. hym. vol. II, f. 68.
Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2375).
Obs. Lentus, coespitosus; pileus orbiculari-convexus (30-40''' dm.) profunde umbilicatus azonus laevis centro albus ambitu pallescens margine brunneus acutus incurvulus in juventute hispidulus per aetatem glabratus; caro alba tenuiuscula (0,5-1''' crs.) tenacella compacta; hymenium album e tubulis breviusculis (1''' lg.), per apicem

stipitis decurrentibus lacero-sinuosis ad marginem pilei usque productis ore minuto rotundo (150-300 μ dm.) donatis albis, dissepimentis concoloribus tenuibus integris divisis efformatum; stipes erectus flexuosulus rigidus (30-35''' lg. × 2-3''' crs.) pileo obscurior glaber v. saepius deorsum albo-pruinulosus, basi fasciculato-connatus. Specimina puiggariana a typo satis recedentia et ad *P. agariceum* Brk. et *P. arcularium* (Btsch.) Fr. nonnihil vergentia!

99. Polyporus flexipes Fr. — Sacc., l. c. f. 69.

Hab. Ad palos cariosos putrescentes prope *Apiahy*, Oct. 1888 (sub n. 2916).

Obs. Pileus excentricus, e convexo infundibuliformis (50''' dm.) azonus primo lutescens dein rufescenti-fulvus, obsolete colliculosus, glaber, margine subinvolutus e pulverulento-hispidulus, e coriaceo mollis; caro tenuis (0,3-0,5''' crs.) fibrosa alba; stipes incurvulus (30-40''' lg.) irregulariter flexuosus, superne teres gracilis (3''' crs.) pallescenti-lutescens inferne leniter sensimque incrassatus (5''' crs.) saepeque compressus pallide rufescens e coriaceo sublignosus, primo pruinula subcinerascente vestitus dein glabratus non v. vix laxissime papillosus; hymenium in apicem stipitis subdecurrens, pallescenti-lutescens, e tubulis mediocribus (1,5-2''' lg.), centralibus irregulariter anguloso-elongatis (0,5-0,6''' dm.), marginalibus angulato-rotundatis minoribus (0,3-0,4''' dm.), dissepimentis concoloribus subtenuibus acie subdenticulatis divisis compositum; sporae non visae. Species pulchella priori satis affinis, sed summopere magnitudine formaque pilei ludens.

100. Polyporus stipitarius B. et C. — Sacc., l. c. f. 71.

Hab. Ad truncos arborum cariosos in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2361).

Obs. Lentus, solitarius; pileus e convexo profundiuscule umbilicatus (25-35''' dm.) tenuis, coriaceus azonus laevis testaceus v. fusco-rufescens, margine subinvolutus integer acutus glaber; caro tenuissima (0,3-0,5''' crs.) alba tenacella; hymenium non v. vix in apicem stipitis decurrens ad marginem pilei fere usque productum album, e tubulis minutissimis (150-200 μ dm.) angulosis, dissepimentis tenuibus integris compositum; stipes erectus rectus gracilis (30-40''' lg.) superne teres (2''' crs.) inferne leniter incrassatus (4''' crs.), albus v. fuscidulus rigidus glaber tenax; sporae globosae (4-5 μ dm.) grosse 1-guttulatae hyalinae subrugulosae. Specimina puiggariana a typo pileo subtestaceo, tubulis sublongiusculis stipiteque longiore nonnihil recedunt.

101. Polyporus pauperculus Speg. (n. sp.)

Diag. Lentus solitarius glaber; pileus orbicularis convexo-umbilicatus tenuis laevis fusco-cinereus; pori vix evoluti minuti albi; stipes brevis pileo concolor rigidus.

Hab. Ad palos vetustos diu intemperiis expositos in *Apiahy*, Jun. 1881 (sub n. 1032).

Obs. Pileus primo convexulus dein modice umbilicatus (15-50''' dm.) terreus v. fusco-cinereus glaber laevis margine integer acutus incurvulus epilosus; caro ligneo-alba coriacea tenuis (2''' crs.) in sicco rigida; hymenium in apicem pilei decurrens ad marginem usque productum album, e poris vix evolutis (0,2''' lg.) densissime constipatis ore minutissimo (150-200 μ) donatis, dissepimentis tenuibus integris compositum; stipes erectus rectus (10-30''' lg.) extus pileo concolor, intus ligneo-albus, lento-rigidus, superne teres (2''' crs.) inferne saepius sensim incrassatus (3-4''' crs.) laevis glaber. Species pulchella priori certe cognata, a qua tamen tubulis conspicue brevioribus vix evolutis recedens. Sporae non visae.

102. Polyporus diabolicus Speg. (n. sp.)

Diag. Lentus, glaber, solitarius: pileus suborbicularis convexo-umbilicatus subtenuis laevis rufescenti-helvolus, margine stricte involutus atque fusco-ater; pori longiusculi perconstipati minutissimi albi; stipes brevis fuscus glaber.

Hab. Ad trabes fabrefactas putridas in *Apiahy*, Apr. 1888 (sine n.).

Obs. Pileus crassiusculus lentus, in sicco coriaceus, e convexo plus minusve umbilicatus, suborbicularis (40–50''' dm.) laevis glaber non v. vix obsoletissime 1-2–concentrice subzonatus, e fulvo rufescens v. testaceo-helvolus, margine integro acuto strictissime subinvoluto fusco-atro (an etiam in vivo?) glabro; caro ligneo-alba (1–2''' crs.) compacta rigida, coriacea; hymenium non v. vix in apicem stipitis subdecurrens margine strictissimo acutissimo substerili cinctum, ex albo pallescens e tubulis longiusculis (1,5–2''' lg.) densissime constipatis ore minutissimis (100-150 μ dm.) polygonis aequalibus, dissepimentis tenuibus integris efformatum; stipes erectus rectus v. subflexuosulus (20''' lg. $\times$ 3''' crs.) saepius subexcentricus, rufescenti-fuscus glaber laevis lignoso-rigidus tenax; sporae non visae. Species pulchra *P. flexipedi* Fr. proxima, sed satis distincta.

103. Polyporus brasiliensis Speg. (n. sp.)

Diag. Lentus glaber; pileus ex infundibulari flabellatus submembranaceo-coriaceus postice submarginatus laevis rufescenti-fuscus stipite concolore laterali noduloso crasso brevissimoque suffultus; hymenium sordide pallescens poris brevissimis minutissimisque efformatum.

Hab. Ad truncos languidos v. subemortuos in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2463).

Obs. Pileus solitarius tenuis membranaceo-pergameneus rigidulus v. saepe coespitoso-subimbricatus, flabellatus v. subspathulatus (50–60''' lg. $\times$ 40–50''' lt.) horizontalis postice subinfundibulari-depressus non v. modice mar-

ginatus, laevis glaber obscure castaneus v. rufescenti-fuscus margine lobatus v. fissus, acutus; caro vix evoluta fuscidula tenacella; hymenium in stipitem subdecurrens ad marginem usque productum sordide pallescens (an album in vivo?) tenuissimum vix evolutum, e poris brevissimis minutissimis (80–100 μ dm. et lg.) dense reticulato-constipatis rotundis compositum; stipes lateralis vix evolutus crassus (10‴ lg. × 4-5‴ crs.) pileo concolor glaber subscrupulosus; sporae globosae (2,5-3 μ dm.) non v. grosse 1-guttulatae, laeves hyalinae. Species habitu *P. guaranitico* Speg., simillima, pileo conspicue tenuiore, porisque brevissimis tamen satis recedens; an ejusdem varietas tantum?

104. Polyporus infernalis Brk. — Sacc., l. c. f. 83.

Hab. Ad truncos arborum in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1486–1685).

Obs. Pileus flabellatus v. subspathulatus (25-35‴ dm. trans. × 20–25‴ dm. ant.-post.) horizontalis planus v. saepius postice plus minusve depressus atque subinfundibularis non v. vix obsolete marginatus, suberoso-coriaceus, hepatico-niger, glaberrimus laevissimus subnitens, margine integer acutus rectus; caro suberosa tenuis (1-2‴ crs.) sordide alutaceo-pallescens; stipes horizontalis v. verticalis brevis crassiusculus (5–15‴ lg. × 3–4‴ crs.) pileo concolor laevis v. vix subrugulosus; hymenium primo albo-cinerascens dein pallescenti-cinereum, in senectute sordide ferrugineum, planum, in stipitem decurrens e poris brevissimis (0,5-1‴ lg.) ore minutissimis (80-100 μ dm.) rotundis aequalibus, in juventute pruinula tenuissima subcarnea obturatis efformatum, zona marginali sterili saepius latissima (1-4‴ lt.) hepatico-nigra cinctum; sporae non visae. Species pulcherrima distinctissima; specimina puiggariana a typo pileo minore atque tenuiore vix deflectunt.

105. Polyporus albo-gilvus B. et C. — Sacc., l. c. f. 112.

Hab. Ad asseres vetustos putrescentes in *Apiahy*, Jul. 1881 (sub n. 1503).

Obs. Species pulchella *P. caesio* (Schrad.) Fr. cognata; pileus glaber, tactu tamen velutinus, laevis albus e reniformi flabellatus (25-30''' dm. trans. × 20''' dm. ant.-post.); caro alba tenuis (1-1,5''' crs.); pori compacti minutissimi longiusculi (1,5''' lg. × 150 μ dm.) in vivo gilvi in sicco albo-pallescentes, hinc inde caesio-rubiginoso maculati.

106. Polyporus roseus (Mntgn.) Speg. — Sacc., l. c. f. 55 (sub *Fistulina*).

Hab. Ad truncos vetustos rimosos in sylvis prope *Apiahy*, Maj. 1881 (sub n. 1500).

Obs. Dichrous; pileus dimidiatus, reniformis v. flabellatus (25-35''' dm. transv. × 15''' dm. ant.-post.) postice saepe subdecurrenti-effusus, non v. vix subungulatus, merismoideo-subimbricatus, carnoso-lentus, bibulus, margine obtusiusculus lobato-repandus in juventute superne velutinus, in vivo vivide roseus, in sicco roseo-rufescens, per aetatem saepius subglabratus; caro fibroso-spongiosula, sordide rufescens, postice crassiuscula (3''' crs.) ad marginem evanescens; hymenium inferum roseum e tubulis breviusculis minutis (0,5''' lg. × 200-250 μ dm.) angulosis, dissepimentis tenuibus integris, acie tomento v. furfure albo v. albo-roseo minuto vestitis compositum; sporae ellipsoideo-ovoideae (5 × 4 μ) laeves, hyalinae. Species pulchella habitu ac natura fere *Fistulinae*, sed hymenio vere polyporeo, pruinositate marginis dissepimentorum tantum anomala. Inter digitos compressa, in vivo, sordide lateritia evadit.

106. Fomes apiahynus Speg. (n. sp.)

Diag. Fomentarius, fulvo-contextus; pileus fusco-castaneus

opacus glaber sulcatus zonatus scalari-triqueter margine sterilis crassissimus truncatus; contextus fulvus; hymenium rufescenti-umbrinum, poris minimis punctiformibus stratosis acie planis; sporae non visae.

Hab. Ad truncos vetustos in sylvis prope *Apiahy*, Maj. 1881 (sub n. 1438).

Obs. Pileus solitarius semiorbicularis, postice truncato-adnatus (60–70‴ dm. transv. × 30–40‴ dm. ant.-post.) non v. vix subdecurrens, superne dense grosse concentrice scalari-sulcatus, cute tenuissima durissima tectus, sordide obscureque fusco-castaneus, in juventute saepe pruinula rubiginosa adspersus mox glabratus nudus opacus; caro compacta durissima lignoso-subflocculosa, obsolete zonata, diffracta fulva sericeo-nitens, secta subspadicea opaca, crassa (10–15‴ crs.); hymenium inferum planum, postice decurrens, ambitu margine verticali sterili et obsolete poroso-punctulato latissimo (crassissimo) (10‴ crs.) abrupte truncato-limitatum, rufescenti-umbrinum, e tubulis dense constipatis longis (10–15‴ lg.), intus contextu vix discoloribus, extus ore rotundo minutissimo (150 μ dm.) primo pruinula fuscescenti-cinerea subevanescente obturatis, dein aperto-nudis, dissepimentis tenuibus donatis efformatum, parce stratosulum; sporae desideratae. Species *F. scalari* Brk. ut videtur peraffinis (an ejusdem tantum varietas?), margine latissime crassissimeque truncato tamen distincta.

107. Fomes ignarius (L.) Fr.? — Sacc., l. c. f. 180.

Hab. Ad truncos annosos in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1706).

Obs. Specimen unicum juvenile parum evolutum et subdubiosum.

108. Fomes australis Fr. — Sac., l. c. f. 176.

Hab. Ad truncos vetustos in sylvis prope *Apiahy*, Maj. 1881 (sub n. 2891).

Obs. Specimen adhuc inevolutum sed tamen distinctissimum.

109. Trametes? lilliputiana Speg. (n. sp.)

Diag. Pusilla; pilei subtenues rigido-coriacei ex effuso reflexo-imbricati, primo ferrugineo-puberuli dein subglabrati cinerei, laeves v. grosse concentrice sulcati, margine obtusi; contextus e fulvo ferrugineus; hymenium primo citrinum dein lutescenti-umbrinum, poris minimis dissepimentis obtusis.

Hab. Ad ramos dejectos arborum in sylvis prope *Apiahy*, Maj. 1881 (sub n. 1489-1835).

Obs. Pilei subungulati (5-20''' dm. transv. × 5-10''' dm. ant.-post.) coriaceo-rigidi, postice saepius adnato-decurrentes, dense aggregato-subimbricati, saepeque confluentes, superne quandoque (in senectute?) dense grosse ac plus minusve acute v. obtuse concentrice 3-5-sulcati ferruginei v. canescenti-rubiginosi minute subspongioso-puberuli, quandoque (in juventute?) vix ambitu 1-sulcati, subargenteo-cinerei, opaci glabri, margine semper obtusissime grosseque rotundati, saepeque citrino-subvelutini; contextus (2-5''' crs. tot.) in parte supera (2-3''' crs.) flocculoso-spongiosulus, sursum versus, ferrugineus, in parte infera (1-1,5''' crs.) compacto-lignosus fusco-ferrugineus in hymenium descendens; hymenium concaviusculum, primo citrinum, dein lutescenti-umbrinum zona sterili marginali subvelutina strictissima cinctum, e poris antice brevissimis (0,5''' lg.), postice elongatis (1-3''' lg.) intus fulvescentes, dense constipatis cum hymeniophoro concretis, ore rotundo minutissimo (100-120 μ dm.) primo pruinula citrina obturatis dein apertis, dissepimentis integris obtusis compositum; sporae non visae. An hymenium stratosulum? Species pulchella forma coloreque pilei ludens, inter *Fomites impolitos* et *Trametes* media, sed hymenii fabrica mox dignoscenda; *T. hispidula* B. et C.

proxima, nec non formae *F. conchati* (Prs.) Fr. a Cl. Ellis (N. Amer. fung. n. 918) editae peraffinis.

110. Daedalea ? diabolica Speg. (n. sp.)

Diag. Pileus orbiculari-dimidiatus v. flabellatus, tenuis, membranaceo-coriaceus, mollis, unicolor, albus, concentrice sulcatus, spongiosulo-velutinus; contextus albus; hymenium subporosum ligneo-album, dissepimentis tenuibus denticulato-laceris, radiatim v. concentrice dispositis efformatum.

Hab. Ad palos vetustos putrescentes prope *Apiahy*, Aut. 1881 (sub n. 1710).

Obs. Pilei solitarii v. gregarii, quandoque orbiculari-dimidiati, quandoque flabellati (10-30‴ dm. transv. × 5-15‴ dm. ant.-post.) postice truncati v. subcuneati, planiusculi, margine acuti integri repanduli, membranaceo-coriacei, flexiles, superne albi v. ligneo-albi, molliter adpressissimeque spongiosulo-velutini v. subhispiduli, plus minusve grosse crebre ac concentrice sulcati, unicolores; contextus tenuis (0,5‴ crs.) flocculoso-stupposo candido; hymenium e ligneo album, e poroso hirpicoideo-lamellosum, lamellulis plus minusve elongatis (0,5-1‴ lg.) tenuibus, acie denticulato-laceris acutis; sporae non visae. Species pulchella pileo *Polysticto biformi* Klotz simillima, hymenio autem fere *Polysticti lacerati* Brk., ab utroque tamen satis distincta; an huc *Daedalea Hobsonii* Brk.?

111. Polystictus Puiggarii Speg. (n. sp.)

Diag. Sacer, mesopus; pileus orbicularis umbilicatus tenuis papyraceus rigidulus crenulatus nitidulus castaneus azonus; stipes rectus gracilis pileo obscurior glaber; hymenium e pallescente subcinerascens, poris brevissimis minutis subrotundis.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Solitarius ; pileus e convexo applanatus plus minusve umbilicatus orbicularis (10–15''' dm.) tenuiter papyraceus, in sicco rigidulus, margine acutissimus incurvulus minute obsoleteque crenulatus, obscure castaneus azonus glaberrimus opacus, laevis v. obsolete minutissimeque radiatim substriatus, contextu tenuissimo (0,3''' crs.) albo fibroso donatus ; hymenium ex albo pallescenti-cinereum non decurrens, margine zona strictissima saepeque deficiente alba sterili cinctum, e poris brevissimis (0,2–0,3''' lg.) intus albis ore minutissimo (150 μ dm.) rotundo plano dissepimentis tenuibus acie integris cinerascentibus compositum ; sporae non visae ; stipes erectus rectus (20-25''' lg. × 2''' crs.) laevis v. irregulariter (an in sicco tantum ?) laxeque rugulosus, fusco-ater, in juventute nubecula obscure ferruginea detersili vestitus, intus albus farctus compactus rigidus tenax basi abrupte insititius. Species pulcherrima elegantissima *P. marasmioidi* Brk. peraffinis, a qua pileo azono castaneo recedit ; an ejusdem tantum varietas ?

112. Polystictus sanguineus (L.) Mey. — Sacc., l. c. f. 229.
Hab. Ad palos truncosque putrescentes vulgatus prope *Apiahy*, Aut. 1881 (sub n. 1501).

113. Polystictus biformis Klotz. — Sacc., l. c. f. 240.
Hab. Ad truncos vetustos in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1572–1616).
Obs. Pilei quandoque peltati resupinato-effusi v. saepius spathulato-flabellati (40–50''' dm. transv. × 25–30''' dm. ant.-post.) dense constipati imbricati saepius confluentes, tenues coriaceo-stuppei rigidulo-molles, planiusculi, primo sublaeves dein concentrice majusculeque sulcati, albi, adpresse e spongioso tomentosulo-velutini, margine obtuse acutati repanduli ; contextus tenuis (1''' crs.) albus stupposus ; hymenium ex albo pallescens v. pallide ligni–

color poris mediocribus (300-350 μ dm.) brevissimis inaequaliter rotundato-angulosis saepe gyroso-confluentes, dissepimentis crassiusculis apice obtusis integris v. sublaceris efformatum, zona marginali sterili plus minusve evoluta (1-1,5''' lt.) cinctum; sporae non visae.

114. POLYSTICTUS PRODITOR Speg. (n. sp.)

Diag. Pileus tenui-coriaceus flabelliformis, zonatus, rufescens adpresse subpulverulentus, stipite brevissimo in discum rufum velutinum dilatato suffultus; contextus albus; hymenium e poris brevibus minutis dissepimentis tenuibus compositum.

Hab. Ad ramos dejectos emortuos in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1618-1674).

Obs. Pilei tenues coriacei subrigidi flabellati postice cuneati v. saepius reniformes (25-40''' dm. transv. × 20-30''' dm. ant.-post.) applanati, sordide rufescenti-alutacei, plus minusve laxe concentriceque zonati, zonis rufis glabris non v. vix sericeo-subnitentibus, margine repanduli v. subcrenati obtusiusculi pallidiores subvelutino-pruinulosi, postice depressi ac stipite brevissimo obscure rufo subvelutino, non v. plus minusve peltato-dilatato subtuberculoso suffulti; contextus albus flocculosus tenuis (1,5''' crs.); hymenium pileo concolor v. subcinerascenti-alutaceum, poris minutis (200 μ dm.) rotundis v. angulosis, dissepimentis tenuibus integris v. lamelloso-laceris compositum, zona marginali strictissima, rarius obsoleta limitatum. Species pulchella elegans *P. versicolori* (L.) Fr. proxima, vix stipite basi in orbem dilatato recedens, atque *P. luteo* Bl. et Nees. nonnihil accedens. Hymenium e latere visum ex albo alutaceum, verticaliter inspectum obscure rufescens.

115. POLYSTICTUS LUTEUS Bl. et Nees ? — Sacc., l. c. f. 218.

Hab. Ad asseres diu intemperiis expositas in *Apiahy*, Aest. 1881 (sub n. 1679).

Obs. Pilei simplices v. connato-subimbricati, cuneato-flabellati (30-35‴ dm. transv. × 25-35‴ dm. ant.-post.) coriacei tenues rigido-duri persistentes, utrinque applanati, glabri obsolete strictissemeque zonati lutei v. praecipue in parte postica rufescenti-castanei, opaci v. leniter sericeo-nitentes, margine acuti e crenato lobati, stipite brevissimo saepeque obsoleto plus minusve tuberculoso atque peltato-effuso suffulti; contextus tenuis (1‴ crs.) albus compactus; hymenium pileo concolor v. sordide pallideque subrufescens e tubulis (0,5-1‴ lg.) dense constipatis, ore irregulari minuto (150-220 μ), dissepimentis longe denticulato-laceris compositum; sporae non visae. An melius forma *P. hinnulei* B. et Ck., Sacc., l. c. f. 234?

116. Polystictus subhydrophilus Speg. (n. sp.)

Diag. Pileus carnoso-coriaceus e reniformi flabellatus glabratus sordide e lutescente rufescens ambitu zonatus pulverulento-velutinus margine lobatus, postice in stipite brevi crassoque angustatus; contextus albus; hymenium sordide pallescens, poris minimis angulosis denticulatis.

Hab. Ad palos cariosos mucidos in hortis, *Apiahy*, Aest. 1881 (sub n. 1514).

Obs. Pilei solitarii v. gregarii saepeque subimbricato-confluentes, dimidiato-flabellati (30-50‴ dm. transv. × 15-20‴ dm. ant.-post.), postice reniformes v. cuneati, superne densissime irregulariterque scrupulosi glabri sordide pallescenti-sublutescentes, zonis concentricis paucis obsoletis rufescentibus ornati, margine obtusi lobati v. crenati subsulcati saepeque fissi molliter pulverulento-velutini alutaceo-pallescentes, in vivo utrinque applanati subcarnoso-succosi, in sicco, ambitu praecipue, con-

tracto-subcrispati ligneo-durissimi; contextus albus tenuis (1''' crs.) subfibrosus; stipes brevis crassus (10''' lg. × 10''' crs.) basi plus minusve dilatatus, inferne subevanescens, pileo concolor, scrupuloso-glabratus; hymenium sordide pallescens non v. vix ad griseum v. carneum vergens, zona marginali sterili pallescente strictissima ubique cinctum, e tubulis tenuissimis dense constipatis (1-1,5''' lg.) intus ligneis, ore irregulari saepius retrorsum elongato non v. vix subgyroso minuto (150-200 μ dm.), dissepimentis tenuibus efformatum; sporae non visae. Species sordida *P. hydrophili* B. et C. peraffinis, sed cum ejusdem speciminibus cubensibus comparata satis recedens.

117. Polystictus versicolor (L.) Fr. — Sacc., l. c. f. 253.
Hab. Ad palos truncosque emortuos ubique prope *Apiahy*, per ann. 1880-88.
Obs. Inter formas hujusdem speciei missas, sequens (sub n. 2887) magis anomala atque describenda videtur: Pileis e basi late tenuiterque effusa adsurgentibus dense imbricato-congestis, quandoque flabellatis, quandoque dense laciniato-dissectis, laciniis apice obconico-expansis infundibuliformibus hymeniophoris, postice scruposo-papillosis e glabrato velutinis subsericeo-nitentibus, ambitu dealbatis glabris opacis, margine acutis crenatis; contextu flocculoso compacto crassiusculo (1-2''' crs.) albo, cum hymenio continuo; hymenio albo e poris minutis brevissimis dissepimentis subtenuibus primo obtusis dein acutiusculis sublaceris. Forma *P. cristulato* Speg. nonnihil accedens.

118. Polystictus rufo-pictus B. et C. — Sacc., l. c. f. 255.
Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Aest. et Aut. 1881 (sub n. 1571-1641).

Obs. Pilei tenuiusculi coriacei rigiduli solitarii v. plus minusve dense gregarii saepeque imbricati, dimidiato-flabellati (20-40''' dm. transv. × 20-25''' dm. ant.-post.), postice cuneati v. reniformes, puncto plus minusve incrassato adfixi, rarius confluentes applanati v. convexuli, margine acuti integri v. subcrenato-lobati, radiatim undulato-rugulosi, pubescentia velutina opaca minuta adpressa cinerea v. cinereo-rufescente vestiti, zonis 2 (rarius 3) latiusculis (2-4''' lt.) glabratis aureo-rufis nitentibus concentricis ornati; contextus tenuis (1''' crs.) albus compacto-flocculosus; hymenium sordide e pallescente alutaceum, e poris dense constipatis breviusculis (1''' lg.), ore minuto (150-200 μ dm.) rotundato-angulato, dissepimentis tenuibus integris compositum. Species pulcherrima priori summopere affinis a qua colore atque poris magis regularibus praecipue recedit.

119. Polystictus sobrius B. et C. — Sacc., l. c. f. 264.

Hab. Ad palos cariosos putrescentes in hortis, *Apiahy*, Aut. 1881 (sub n. 1494).

Obs. Pileus tenuiter membranaceus rigidulus planissimus, postice plus minusve cuneatus (20-25''' dm. transv. × 15-20''' dm. ant.-post.) margine acutissimus integer v. vix crenulatus, primo subpulverulento-pruinulosus dein glaberrimus umbrino-cinereus nebulosus opacus, zonis obsoletis densis strictissimis subpurpurascentibus opacis saepeque deficientibus ornatus, puncto postico tuberculoso-incrassato adfixus; contextus tenuissimus (0,5''' crs.) ex albo perdilute fuscescens flocculosus; hymenium sordide e pallescente subcinereum, zona saepius latiuscula (1-1,5''' lt.) sterili marginali cinctum, e tubulis brevissimis (0,5''' lg.) ore minutissimis (120-150 μ dm.), primo rotundato-angulatis integris dein subgyroso-laceris, dissepimentis tenuissimis compositum; sporae non visae. Forma pulchella *P. sectori* (Erh.) Fr. accedens; an ejus-

dem varietas?; specimina puiggariana a typo pororum minutie nonnihil recedunt.

120. Polystictus hirsutus Fr. — Sacc., l. c. f. 257.

Hab. Ad trabes putrescentes in *Apiahy*, vere 1881 (sub n. 1500).

121. Polystictus veluticeps Speg. (n. sp.)

Diag. Coriaceus, versicolor, hirsutus; pileus crassiusculus e cupulato orbiculari-dimidiatus, postice marginatus dorso umbonatus ibique puncto adfixo, grosse dense atque concentrice sulcatus sordide albo-pallescens, velutino-hirsutus unicolor; contextus albus; hymenium sordide album, poris brevissimis minutis, dissepimentis obtusis efformatum.

Hab. Ad palos emortuos in hortis prope *Apiahy*, Aut. 1881 (sine n.).

Obs. Pileus solitarius crassiuscule coriaceus subflexilis, cupulato-concavus, valvae conchilii e *Venus* genere simillimus, ex orbiculari subdimidiatus (40‴ dm. transv. × 25‴ dm. ant.-post.) postice late marginatus ubique liber, dorso umbonatus puncto tantum matrici adfixus, margine obtusiusculus integerrimus, sulcis crassiusculis densis (marginem versus subevanescentibus) notatus, sordide obscureque ex alutaceo pallescens, dense velutino-hispidus; contextus (1‴ crs.) albus compactus fibroso-flocculosus; hymenium tenuissimum zona marginali sterili subobsoleta obtusa cinctum, sordide pallescens, e tubulis brevissimis (0,3‴ lg.) densissime constipatis, ore minutis (150-200 μ) rotundis integerrimis, dissepimentis tenuibus acie obtusis compositum. Species elegans *P. pectunculo* Lév. certe proxima, sed satis distincta.

122. Polystictus umbonatus Fr. — Sacc., l. c. f. 266.

Diag. Ad palos vetustos putrescentes in hortis prope *Apiahy*, Aest. 1881 (sub n. 1509).

Obs. *Exagonia Friesiana* Speg. in Fung. guar. pug. I, n. 55 edita, huc sine ullo dubio ducenda, ut varietas poris conspicue latioribus donata.

123. Polystictus consobrinus Speg. (n. sp.)

Diag. Pileus tenuis coriaceus flabellatus, planus cervinus purpureo-zonatus adpressissime velutinus subsericeo-nitens; contextus sordide albus; hymenium sterili-marginatum, fusco-pallescens, poris brevibus irregularibus mediocribus, centro lamelloso-dentatis.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1634).

Obs. Pilei solitarii gregarii, saepe lateraliter confluentes, dimidiato-flabellati (20-35''' dm. transv. × 10-18''' dm. ant.-post.) postice subcuneati v. reniformes applanati margine integri v. obsolete crenati acuti, cervini v. umbrino-v. rufescenti-cervini, zonis 2 (rarius 3) purpurascentibus strictis subglabratis concentricis ornati, ubique adpressissime puberulo-velutini, subsericeo-nitentes; contextus tenuis (0,5 crs.) e fibroso flocculosus tenax ex albo perdilute subfuscescens; hymenium planum antice zona marginali sterili latiuscula (1-2''' lt.) cinctum, e poris ore mediocribus (0,4-0,6''' dm.) rotundato-angulosis, ambitu integris, centro dentato-laceris brevibus (0,5-0,8''' lg.), dissepimentis tenuibus efformatum, sordide e fusco pallescens. Species *P. pinsito* Fr. cognata, sed pileo subcrassiore magis rigido cuneato-flabellato adpresse velutino, poris hymenii minoribus recedens.

124. Polystictus Kixianus Lév. — Sacc., l. c. f. 264.

Hab. Ad caudices emortuos in sylvis prope *Apiahy*, Maj. 1888 (sine n.).

Obs. Pilei solitarii v. laxe gregarii, dimidiato-orbiculares v.

flabellati (20-25''' dm. transv. × 15-20''' dm. ant.-post.) tenues coriacei e rigido flexiles applanati v. convexuli, postice cuneati, truncati v. subreniformes, ibique saepius depressuli, stipite brevissimo tuberculoso horizontali, saepe deficiente, suffulti, unicolores, candidi v. vix hinc inde obsoletissime subrufescentes, glaberrimi subnitentes, ambitu leniter concentrice sulcati, margine acuti integri v. vix repanduli; contextus tenuis (1''' crs.) albus flocculosus; hymenium applanatum v. concaviusculum zona sterili marginali stricta alba cinctum, sordide ochroleucum e poris breviusculis (1-2''' lg.) dense constipatis, ore rotundato-angulosis minutis (200 μ dm.), dissepimentis integris tenuibus acutiusculis efformatum; sporae non visae. Species pulcherrima pileo subcuticuloso candido glaberrimo ex opaco nitente distinctissima.

125. Polystictus tenuis (Lk.) Ck.? — Sacc., l. c. p. 288.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Apr. 1881 (sub n. 1511).

Obs. Pilei tenues coriacei rigiduli dimidiato-flabellati (60-70''' dm. transv. × 45-50''' dm. ant.-post.) postice truncati v. subcuneati, puncto marginali-dorsali incrassato adfixi, applanati, margine acutissimi dense crenato-lobati, radiatim ruguloso-fibrillosi, rufescenti-cervini, glaberrimi subsericeo-nitentes, laxe 3-4-zonati, zonis strictis subobsoletis quandoque glabratis purpurascentibus, quandoque rufo-pulverulentis; contextus tenuis (1''' crs.) sordide lignicolor v. pallescenti-fuscidulus; hymenium applanatum v. saepius radiatim undulato-rugulosum zona sterili marginali stricta saepius obsoleta cinctum, cervinum, e poris brevibus (0,5''' lg.) dense constipatis, ore angulatis minutis (150 μ dm.) saepius integris, dissepimentis tenuibus donatis compositum. Species *P. sectori* (Ehr.) Fr. subsimilis, sed certe diversa.

126. Polystictus sector (Ehr.) Fr. — Sacc., l. c. f. 285.

Hab. Vulgatos ad palos vetustos diu intemperiis expositos prope *Apiahy*, Aut. 1881 (sub n. 1646).

Obs. Specimina nonnulla typica poris integris, nonnulla alia poris lacero-gyrosis *P. ludenti* Speg. vergentia.

127. Polystictus sordidissimus Speg. (n. sp.)

Diag. Pileus applanato-flabellatus, margine acutus crenato-fimbriatus, radiatim rugoso-rivulosus, primo tomento sordide cinerascente leproso tectus dein ambitu late glabratus, sordide e terreo umbrino-fuscus; contextus fusco-umbrinus lamelloso-spongiosus; hymenium umbrino-fuscum poris brevissimis minutis dissepimentis denticulatis.

Hab. Ad palos putrescentes humo obovolutos in sylvis prope *Apiahy*, Aest. 1881 (sub n. 1582).

Obs. Pilei solitarii v. hinc inde laxe gregarii flabellati (50-60‴ dm. trans. × 30‴ dm. ant.-post.) postice truncati v. subcuneati, latiuscule adnati, planissimi, subtenues rigiduli, margine acutissimi recti, dense irregulariterque subfimbriato-crenati, concentrice non zonati nec sulcati, sed radiatim crebre rugoso-subfibrosi, primo tomento adpresso crassiusculo leproso sordide cinerascente tecti, dein praecipue ambitu plus minusve late glabrati, terrei v. umbrino-fusci, maculis obsoletissimis subvinosis inspersi; contextus fuscus v. umbrino-fuscus, crassiusculus (2-2,5‴ crs. ad basin) grosse lamelloso-spongiosus lacunosus; hymenium umbrino-fuscum v. sordide e cinereo fuscum, ad marginem usque productum tubulis brevissimis (0,5‴ lg.), ore anguloso minuto (150 μ dm), dissepimentis tenuibus acie acutis denticulatis compositum; sporae non visae. Species habitu fere *P. versicoloris* Fr. subputrescentis, hymenioque *P. sectori* (Ehr.) Fr., contextu autem lacunoso-lamelloso distinctissima.

128. Polystictus papyraceus Fr. — Sacc., l. c. p. 287.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1621).

Obs. Pilei resupinati suborbiculati (20-30''' dm.) papyracei flexiles ambitu libero-reflexi, dorso ligneo-pallescentes, glabri v. radiatim minute denseque cristulato-papillulati; contextus tenuis (0,3''' crs.) albus ; hymenium e poris mediocribus (220-280 μ dm.) angulosis, saepe elongato-decurrentibus dissepimentis integris acutiusculis compositum, sordide album v. pallidissime lignicolor, zona marginali strictissima cinctum. Species pulchella distinctissima sed a *Poriis* nullo modo separanda mihi videtur!

129. Polystictus gleoporoides Speg. (n. sp.)

Diag. Membranaceus; pileus coriaceus tenuis rigidus flabellatus tomento farinoso arcte adpresso albo-cinerascente, zonis concentricis subobsoletis subglabratis vinosis ornatus; contextus fuscus; hymenium plumbeo-cinereus, tubulis brevibus, ore rotundis minutissimis compositum.

Hab. Ad palos vetustos putrescentes in hortis, *Apiahy*, Jun. 1881 (sub n. 1497).

Obs. Pilei tenues coriacei rigiduli dimidiati subspathulati v. flabellati (40-50''' dm. trans. × 30-40''' dm. ant.-post.), in vivo applanati in sicco subconchato-contractuli, margine acuti, subcrenato-lobulati, postice truncati v. cuneati plus minusve adnati, superne tomento arcte adpresso compactiusculo tenui ex albo sordide obsoleteque cinerascente v. pallescente, zonis 2-3, praecipue marginalibus, latiusculis (1-3''' lt.), glabratis nebuloso-vinosis ornatus; contextus fibroso-compactus fuscus tenuis (0,3-0,5''' crs.); hymenium cinereo-plumbeum v. cinereo-glaucum e tubulis brevibus (0,5-1''' lg.) perconstipatis intus cinereis, ore rotundato-angulosis (100-120 μ dm.) dissepimentis tenuibus acie integris obtusis glaucis compositum, in vivo ac in juventute carnosulo-subceraceum dein subcar-

tilagineum ac in sicco subrimulosum; sporae non visae. Species pulcherrima habitu *P. sectori* (Ehr.) Fr. affinis, in juventute natura fere *Gleoporoidea* distinctissima.

130. Gleoporus candidus Speg. — Sacc., l. c. f. 403.
Hab. Ad truncos ramosque emortuos in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1617).

131. Gleoporus rhipidium (Brk.) Speg. — *Favolus rhipidium* Brk. — Sacc., l. c. f. 397; *Gleoporus pusillus* Lév.— Sacc., l. c. f. 404.
Hab. Ad rimas truncorum ramorumque languentium prope *Apiahy*, per ann. 1881 (sub n. 1512-1633).
Obs. Pileus ex orbiculari reniformis (10-15''' dm.), alutaceo-coccineus v. roseo-pallescens, glaber v. subpulverulento-furfuraceus, laevis v. concentrice sulcatus; stipes plus minusve elongatus (3-8''' lg. × 1''' crs). teres alutaceus rufescens v. flavescens; hymenium in vivo primo subtremelloideum dein carnosulo-ceraceum, poris elongatis, marginalibus praecipue fere radiato-lamellosis, roseis carneis v. rubris, saepe glaucescenti-pruinosis. Species pulcherrima admodum variabilis.

132. Gleoporus guaraniticus Speg. — Sacc., l. c. f. 406 (sub *Laschia*).
Hab. Ad ramos dejectos putrescentes in umbrosis prope *Apiahy*, Maj. 1888 (sub n. 2897).
Obs. Species *G. rhipidio* (Brk.) Speg. peraffinis, a quo tamen pileo convexo saepius sessili albo v. alutaceo-albo glabro non v. vix obsoletissime papuloso hymenioque pallidiore non radiatim evoluto recedit.

133. Favolus? Puiggarii Speg. (n. sp.)
Diag. Pileus tenuis e membranaceo subcarnosulus orbicularis convexulus postice abrupte profundeque depressus,

ibique cordato-fissus, superne papulosus fusco-rufescens glaber; hymenium pileo vix pallidius, poris magnis rhomboideis, dissepimentis membranaceo-carnosulis integris; stipes definite lateralis horizontalis teres tenuis puberulus ex albo pallescens.

Hab. Ad caudices putrescentes in sylvis prope *Apiahy*, Apr. 1881 (sub n. 1443).

Obs. Pileus tenuiter carnosulo-membranaceus orbicularis (5-10''' dm.) convexulus horizontalis margine integer, centro minute profundeque umbilicatus postice strictissime cordato-fissus, rima ad umbilicum usque producta, superne subbullosus, bullis centralibus majoribus marginem versus gradatim minoribus, in sicco fusco-umbrinus v. badius (an pallescenti-alutaceus in vivo?) glaber, quandoque sub lente valida minutissime pulverulentus; hymenium inferum fusco-pallescens (album in vivo?) poris exagonis mediis majusculis ac profundis (0,5-1''' dm. $\times$ 0,5-1''' prof.), periphaericis sensim minoribus brevioribusque, dissepimentis subcarnosulo-membranaceis acie obtusis integris donatum; sporae ellipsoideae (8-10 $\times$ 4-5 μ) laeves, hyalinae; stipes sub umbilico centrali pilei exsurgens elongatus, horizontalis v. subverticalis teres gracilis (4-8''' lg. $\times$ 0,5''' crass.), deorsum non v. vix incrassutulus fistulosus pileo pallidior, pruinula minutissima alba vestitus. An *Laschia papulata* Mntgn. typica?

134. Favolus? pygmeus Speg. (n. sp.)

Diag. Pileus peltato-resupinatus v. reniformi-horizontalis tenuissime membranaceus subtremellosus ex albo pallescens v. subfulvescens superne papulosus glaber; hymenium pileo concolor grosse polygono-alveolatum; stipes nullus v. vix evolutus concolor.

Hab. Ad ramos dejectos emortuos in dumetis prope *Apiahy*, Aut. 1881 (sub n. 1650).

Obs. Sparsus v. laxe gregarius; pilei tenuissime membranacei e carnoso subtremellosi minuti (1–5‴ dm.) quandoque scutato-resupinati, quandoque ex orbiculari dimidiato-reniformes, puncto v. stipite brevissimo laterali adfixi, horizontales, margine integri, superne convexuli grosse bullosi glabri e pallescente subfulvescentes (albi in vivo?); hymenium pileo concolor v. pallidius, poris centralibus elongato-radiantibus e triangulari pentagonis majoribus profundiusculis (0,5–1‴ long. × 0,5‴ prof.), periphaericis sensim minoribus brevioribusque exagonis dissepimentis membranaceo-carnosulis acie integris obtusis efformatum; sporae globoso-ovatae (6-9 × 4-6 μ) laeves, hyalinae; stipes deficiens (in pileis resupinatis) v. vix evolutus (in horizontalibus) brevissimus tuberculiformis, pileo concolor v. vix pallidior. An *F. pusilli* Fr. varietas? Species pusilla ut prior natura inter genera *Favolum* et *Laschiam* vere media.

135. Laschia auriscalpium Mntgn. — Sacc., l. c. f. 407.

Hab. Ad culmos dejectos putrescentes *Bambusae* cujusdam in uliginosis prope *Apiahy*, Aut. 1881 (sub n. 1443).

Obs. Species jam sub *L. papulata* Speg. (nec Mntgn.) in Fung. arg. pug. IV, n. 28 imprudenter edita; specimina magis evoluta ac eximie servata nunc adhibita, sic describenda videtur: Pileus e membranaceo carnosulus subtremelloideus ex orbiculari reniformis (4–5‴ dm.) convexulus, obsolete papulosus glaber sordide e fusco-lutescens, margine integer; hymenium planum alveolis rotundato-exagonis brevibus (150-250 μ dm. × 0,3-0,4‴ prof.), dissepimentis pro ratione crassiusculis acie integris obtusis compositum; stipes lateralis elongatus teres (3-5‴ long. × 0,3-0,4‴ crass.) fistulosus, pileo pallidior, non v. vix subpulverulentus; sporae ovoideo-subglobosae (8 × 5–6 μ) laeves hyalinae. Species *Favolo Puiggarii* Speg. nonnihil accedens sed certe distincta.

136. Merulius pezizoideus Speg. (n. sp.)

Diag. Pileus tenuiter membranaceus pezizaeformis, extus albus glaber, stipite gracili longiusculo rigidulo concolore suffultus; hymenium e pallescente subfulvum, venulis e centro radiantibus ramoso-anastomosantibus irregulariter reticulatum.

Hab. Ad tigilla dejecta putrescentia in hortis, *Apiahy*, Aut. 1881 (sub n. 1465).

Obs. Solitaria v. laxe gregaria; pilei tenues membranacei flaccidissimi e campanulato infundibuliformes (5–18''' dm. × 250 μ crass.) ambitu integri v. vix undulati, extus albi (albo-pallescentes in sicco), glabri (tactu tamen subvelutini), laeves v. vix obsoletissime subruguloso-reticulati, in stipite centrali v. subexcentrico dorsali recto erecto elongatulo (5-15''' lg. × 0, 3–0,8''' crs.) non v. vix flexuosulo insititio, concolore v. saepius fuscescente cuneato-producti; hymenium totam superficiem internam (superam) pilei obtegens e pallescente fulvescens glabrum, venulis e centro (umbilico) radiantibus dense reticulato-anastomosantibus parum prominulis gracillimis carnosulo-subtremelloideis, masculis irregulariter elongato-subexagonis (1–3''' dm.) efformatum; sporae non visae. Species elegantissima *Pezizae* cujusdam habitu simillima, ad genus *Laschiam* nonnihil vergens.

137. Merulius lacrymans (Jacq.) Fr. — Sacc., l. c. f. 419.

Hab. Ad asseres vetustos putrescentes in *Apiahy*, Maj 1888 (sub n. 2844).

Obs. Specimina brasiliensia insectis nonnihil obliterata, tenuia late effusa obscure ferruginea margine extenuata dealbata, hymenio irregulariter colliculoso-subvenuloso donata. An *Stereum papyrinum* Mntgn. hujusdem speciei forma sterilis depauperataque ?

HYDNEAE Fr.

138. Hydnum flavum Brk. — Sacc., l. c. f. 456.

Hab. Ad truncos ramos caudicesque putrescentes in sylvis prope *Apiahy*, per ann. 1881-88 (sine n. et sub n. 2889).

Obs. Species pulcherrima a genere *Hydno* facillime separanda ac melius *Hymenochaeti* adscribenda, sat variabilis; formae nobiliores haec 3 sequentes:

a) Pilei coriaceo-membranacei, in sicco rigiduli, dimidiato-flabellati (5-20''' dm.) subcucullato-convexuli, postice cuneati non marginati laevissimi; contextus sordide albo-pallescens compactus tenuis (0,5''' crass.); hymenium e pallescente lutescens aculeis cylindraceo-conoidei (150-200 × 50-60 μ), laxiusculis pallide subferrugineis apice sfacelatis atque pallidioribus vestitum.

b) Pilei tenues coriacei, rigidi in sicco, ex orbiculari reniformes subcucullato-convexuli (40-50''' dm.) postice emarginati, stipite brevissimo vix evoluto peltato-dilatato (5-10''' lt.) adfixi, margine integri cristula tenuissima acuta strictissima vix perspicua aucti, fulvo-rufescentes, unicolores, glaberrimi laevissimi; contextus albus compactus subtenuis (1''' crs.); hymenium ex albo pallescens aculeis obscure ferrugineis, cylindraceo-conoideis (200-250 × 40-45 μ) subconfertiusculis apice integris acutissimis vestitum.

c) Pilei tenuiter membranacei, e rigidulo flacciduli, dimidiato-suborbiculares, cucullato-subgaleati (90-100''' dm. trans. × 60-80''' dm. ant.-post.) postice profunde cordato-sinuati marginati stipite parvulo brevissimo tuberculiformi subdorsali adfixi, ambitu integri v. vix subrepanduli, e lutescente sordide pallideque fulvescentes, lituris radiantibus fuscescentibus ramulosis saepe anasto-

mosantibus variegati, margine zona strictissima ferruginea ornati, laevissimi, glaberrimi; contextus albus, marginalis tenuissimus (0,3–0,5''' crs.), postice ad stipitem crassiusculus (1–2''' crs.) compactus; hymenium ex albo sulfureum v. pallide lutescens aculeis laxiusculis conoideo-elongatis (150-200 × 60–65 μ) base albo-luteis apice acutissimis integris rufescentibusque vestitum. An huc *H. brunneo-leucum* B. et C.?

139. Hydnum Puiggarii Speg. (n. sp.)

Diag. Pilei coriacei duri azoni effuso-reflexi vix pulverulento-pruinulosi antice pallescentes postice subrufescentes, contextu ligneo-fuscescente; aculei ligneo-pallescentes conferti breves subaequales acuti saepius integri.

Hab. Ad truncos languidos in sylvis prope *Apiahy,* ann. 1881 (sub n. 1700).

Obs. Pilei solitarii v. saepius aggregato-confluentes elliptico-suborbiculares (30-40''' dm. trans. × 30''' dm. ant.-post.) effuso-reflexi, in dimidia parte postica adnato-decurrentes, in dimidia antica horizontaliter flabellato-liberi coriacei (in sicco) rigidi duri, margine integri v. repandi, obtuse acutati, deorsum e rufescente pallide ferruginei, subimperspicue adpresseque pulverulento-velutini, ambitu lignicolores subglabrati opaci; contextus compactus subligneus subericolor crassiusculus (2,5-3''' crs.) gradatim periphaerice attenuatus; hymenium ex albo lignicolor, zona marginali sterili laevi plus minusve lata (1-5''' lat.) concolore cinctum, planum v. colliculoso-scrupulosum, aculeis verticalibus confertis e cylindraceo subtriquetris non v. compressiusculis mediocribus (1–2''' lg. × 0,5''' crs.) apice acutis integris v. vix 1–2 denticulatis concoloribus vestitum. Species *H. pudorino* Fr. affinis, pileo fere glabrato sublignoso-coriaceo satis tamen recedens.

140. Hirpex cartilagineus Speg. — Sacc., l. c. f. 491.

Hab. Ad cortices truncorum putrescentium in sylvis prope *Apiahy,* Jun. 1881 (sub n. 1,508).

Obs. Hymenium in juventute ex albo cinereo-argenteum per aetatem sordide ferrugineum; specimina brasiliensia formae effusae *Polysticti floridani* Brk. (Rav. Nort-Am. fung. n. 7) satis accedentia.

141. Grandinia granulosa Fr. — Sacc., l. c. f. 501.

Hab. Ad ligna putrida mucida in sylvaticis prope *Apiahy,* Maj. 1888 (sub n. 2359).

THELEPHOREAE Pers.

142. Thelephora lilliputiana Speg. (n. sp.)

Diag. Minuta helvola dense coespitosa; pilei tenues papyracei rigiduli flabellati antice saepius integri postice cuneati saepius ramulosi, superne glabri fibrillosi pallescenti-rufescentes; contextus albo-ligneus; hymenium concaviusculum helvolum subpulverulentum.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy,* Maj. 1888 (sub n. 2372).

Obs. Coespites laxe gregarii v. sparsi e rimis corticis erumpentes flabellati (10''' dm. trans. × 5-6''' dm. ant.-post.) dense intricato-pileiferi; pileoli spathulato-flabellati (2-3''' dm. trans.) margine acutiusculi integri tenuiter papyraceo-rigiduli, applanati v. convexuli, postice in stipite cuneato-attenuati, superne pallescenti-rufescentes dein sordide pallescentes, glabri azoni, vix sub lente valida radiatim obsoleteque fibrillosi; contextus compactus lignicolor tenuis; hymenium e plano concaviusculum helvolum v. carneum, primo pruinoso-pulverulentum dein glabratum; stipites e nodulo communi crassiusculo albe-

scente lignoso dense fasciculato-adsurgentes (2-4''' long.) sursum dense ramoso-lobati, ramulis quandoque pileatis quandoque lineari-elongatis sterilibus; sporae non visae. Species trivialis pusilla habitu saepe *Hymenochaeti asperae* Brk. similis, sed mox dignoscenda.

143. Stereum rufo-nitens Speg. (n. sp.)

Diag. Mesopus: pileus tenuiter papyraceo-coriaceus infundibuliformis rufus sericeo-nitens, ambitu glaber laevis zonis concentricis obscurioribus notatus, centro longe grosseque crinito-setulosus; hymenium planum subpulverulentum pallescenti-roseolum; stipes centralis brevis crassus rufo-pallescens tuberculoso-adnatus.

Hab. Ad caudices putrescentes rarissime prope *Apiahy*, Aest. 1881 (sine n.).

Obs. Pileus solitarius obconico-cyathiformis (15''' alt. × 12''' lt.) tenuiter papyraceo-coriaceus cartilagineo-rigidulus fulvus v. rufus centro (parte infera interna infundibuli) setulis lamellosis longis (1-3''' lg. × 150-250''' lt.) dense intricatis rufescentibus vestitus, ambitu glaber laevis sericeo-nitens, zonis concentricis strictis atque densis plus minusve obscurioribus ornatus, margine acutus integer v. vix minutissime erosulo-crenatulus, inferne in stipite centrali subterete duro brevi crassiusculo (3-5''' lg. × 1,5-2''' crs.) pallescenti-rufescente farcto cuneato-productus; hymenium tenuissimum partem externam totam pilei vestiens, laeve, non v. vix pulverulentum carneum v. e pallescente dilute roseum. Species pulcherrima *St. cyathiformi* Fr. certe peraffinis sed satis riteque diversa.

144. Stereum squamula Speg. (n. sp.)

Diag. Pleuropus pusillum lignicolor: pilei tenues coriaceo-rigidi, flabellati v. spathulati integri v. lobato-fissi

glabri concentrice sulcati subradiatim fibrilloso-rugulosi, postice cuneato-stipitati; hymenium concolor laeve.

Hab. Ad terram nudam v. schidias putrescentes prope *Apiahy*, 1881-88 (sub n. 1638-2885).

Obs. Solitarium v. hinc inde laxe gregarium; pilei quandoque suborbiculari-flabellati integri atque sessiles (5-10‴ alt. × 45‴ dm.), quandoque elongato-spathulati lobato-fissi postice plus minusve longe cuneato-stipitati (5-15‴ alt. × 10-15‴ lt.), tenues papyraceo-coriacei rigiduli, superne convexuli glabri e pallescente lignicolores laeves v. concentrice 1-3-sulcati atque (praecipue in parte postica) radiatim fibrilloso-rugulosi; contextus albus compactus tenuis (0,3-0,5‴ crs.); hymenium tenuissimum planum subceraceum primo album dein sordide lignicolor; sporae non visae. Species saepius terrestris, raro frustulis ligneis terra obovolutis adhaerens.

145. Stereum fasciatum Schw. — Sacc., l. c. f. 560.

Hab. Ad palos putrescentes in hortis, *Apiahy*, ann. 1881 (sub n. 1450-1675).

Obs. Pilei tenuiter coriacei rigidi quandoque flabellato-applanati, quandoque umbonato-subconchati (25-50‴ dm. trans. × 20-25‴ dm. ant.-post.) sessiles v. substipitati, albidi v. pallescenti-cinerei, adpresse velutini, margine praecipue zonis latiusculis castaneis nitentibus concentricis notatus; contextus albus tenuis (0,5-0,8‴ crs.); hymenium glabrum subcarneum laeve v. obsoletissime concentrice v. radiatim sulcatum; sporae non visae.

146. Stereum ochroleucum Fr. — Sacc., l. c. f. 562.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1558).

Obs. Pilei coriaceo-rigiduli e pallescente canescentes hispiduli subsericei obsolete concentriceque zonati; hymenium laeve glabrum lutescens.

147. STEREUM HIRSUTUM (W.) Fr. — Sacc., l. c. f. 563.
Hab. Ad ramulos emortuos in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1513).

148. STEREUM BICOLOR (Pers.) Fr. — Sacc., l. c. f. 565.
Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Aest. 1881 (sub n. 1060).

149. STEREUM COFFEARUM B. et C. — Sacc. l. c. f. 576.
Hab. Ad cortices adhuc virentes arborum in dumetis prope *Apiahy*, Maj. 1888 (sine n.).
Obs. Pilei coriacei rigidi saepius resupinati, margine stricte libero-reflexi sordide fusco-cinerei, ex hispidulo glabrati obsolete zonati; contextus umbrinus (0,2-0,5‴ crs.) compactus; hymenium sordide fuscum pruinula cinereo-umbrina detersili adspersum; sporae ovoideae (6-7 × 2-2,5 μ) hyalinae.

150. STEREUM PUIGGARII Speg. (n. sp.)
Diag. Scutato-pezizoideum sessile coriaceum durum, ambitu subinvolutum undulatum, dorso puncto adfixum atque dense spongioso-lanosum sericeo-aterrimum; contextus tenuis albus; hymenium sordide fusco-cinerascens, primo cinereo-pruinulosum.
Hab. Ad caudices putrescentes in sylvis prope *Apiahy*, Jun. 1888 (sub n. 2378).
Obs. Pilei solitarii v. laxe gregarii coriacei rigidi duri orbiculares (15-20‴ dm.) resupinato-scutati, dorso puncto tuberculoso adfixi atque strato tomentoso crasso dense constipato aterrimo molli subsericeo-nitente vestiti, ambitu reflexo-subinvoluti; contextus tenuis (0,5-1‴ crs.) compactus rigidus ligneo-albus: hymenium planum primo cinereo-pulverulentum dein glabratum sordide e fusco umbrinum. Species pulcherrima generi *Coniophorae* DC.

nonnihil accedens, distinctissima; hymenium subcrustaceum facillime a contextu separabile.

151. Stereum frustulosum (Pers.) Fr. — Sacc., l. c. f. 572.

Hab. Ad caudices muscosos putrescentes in sylvis prope *Apiahy,* Jun. 1888 (sub n. 2906).

Obs. Species notis plurimis generi *Coniophorae* DC. vergens; sporae ovoideae (4-5 × 2,5–3 μ) hyalinae.

152. Hymenochaete damaecornis (Lnk.) Lév. — Sacc., l. c. f. 589.

Hab. Ad ramos dejectos putrescentes arborum in sylvis prope *Apiahy,* Apr. 1888 (sub n. 2883).

Obs. I. Pilei flabellato-spathulati postice attenuato-stipitati saepius lateraliter confluenti-infundibuliformes, tenues membranaceo-coriacei rigiduli, superne fulvo-rufescentes subsericeo-nitentes glabri, obsoletissime stricte concentriceque obscurius zonati, radiatim fibrilloso-rugulosi, margine crenato-lobati; contextus helvolus; hymenium badium, zona sterili latiuscula pallidiore marginali cinctum, setulis rigidulis elongato-conoideis acutis (100-150 × 20 μ) ferrugineis stricte canaliculatis dense vestitum; stipites saepius breviusculi compressi obscure ferruginei, velutino-pruinulosi. Specimina brasiliensia cum cubensibus comparata vix setulis nonnihil gracilioribus differre videntur.

Obs. II. Specimina sub hoc nomine in *Fungis guaranaticis* pug. I, n. 72, nunc melius inspecta, speciem alienam novam sistunt, sic nuncupanda: Hymenochaete Balansae Speg. (n. sp.) — Pilei coriacei rigidi spathulati, superne fulvo-rufi pulverulento-velutini opaci azoni radiatim ruguloso-fibrillosi, margine longe denseque laciniato-fimbriati; contextus helvolus; hymenium ochraceum, zona marginali substerili plus minusve evoluta fuscescente cinctum, setulis rigidulis elongato-conoideis (50-100 ×

10-15 μ) obtuse acutatis latiuscule canaliculatis dense vestitum; stipes elongatus basie teres simplex sursum applanatus ramosus lignoso-durus, ochraceo-ferrugineus, pulverulento-velutinus.

153. HYMENOCHAETE ELEGANTISSIMA Speg. — Sacc., l. c. f. 594.
Hab. Ad palos corticatos putrescentes in hortis, *Apiahy*, Aest. 1881 (sub n. 1574-76).
Obs. Species nobilissima ab *H. tenuissima* Brk. vix recedens, pileis conspicue majoribus hymenioque carneo-umbrino vix margine fulvo-ferrugineo; setulae conoideae (90-100 × 10 μ). Species *Hymenochaetis* omnes inter se peraffines ac difficillime extricandae!

154. CORTICIUM ARACHNOIDEUM Brk. — Sacc., l. c. f. 611.
Hab. Ad muscos adhuc vivos in truncis prope *Apiahy*, Oct. 1881 (sine n.).

155. CORTICIUM LAEVE Pers. — Sacc., l. c. f. 611.
Hab. Ad truncos palosque vetustos putrescentes prope *Apiahy*, per ann. 1881-88 (sub n. 1651-2577.)
Obs. Variat margine adnato-effusus v. effuso-reflexus.

156. HYPOCHNUS RUBRO-CINCTUS Ehrb. — Sacc., l. c. f. 663.
Hab. Ad corticem *Velloziae* speciei cujusdam in sylvis prope *Itabirá do Campo, Rio das Velhas*, Sept. 1887 (leg. Cl. I. Arechavaleta).

157. CYPHELLA PUIGGARII Speg. (n. sp.)
Diag. Orbicularis cupulata sessilis, tenuiter ceraceo-membranacea, candida extus intusque glabra.
Hab. Ad culmos dejectos putrescentes *Graminacearum* prope *Apiahy* (sine n.).
Obs. Pilei solitarii v. hinc inde laxe gregarii, cupulato-orbiculares v. auriculaeformes parvuli (2-8‴ dm.) sessiles te-

nuiter membranaceo-subceracei, margine integri v. repanduli, candidi (in sicco subpallescentes), extus glaberrimi laevissimi, puncto impresso matrici adnati; hymenium ceraceum tenuissimum laeve glaberrimum ex albo subpallescens; sporae non visae. Species *C. culmicolae* Fr. affinis sed tenuior ac magis alba.

158. Cyphella albo-violascens (A. et S.) Karst. — Sacc., l. c. f 669.
Hab. Ad ramulos dejectos putrescentes in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2719).

159. Cora glabrata Spreng. — Sacc., l. c. 686.
Hab. Ad truncos dejectos putrescentes in campis prope *Apiahy*, Jan. 1881 (sub n. 1506).
Obs. Species pulchella, primo obtutu pro *Sterei cartilaginei* Fr. forma dimidiato-flabellata facillime sumenda, mox tamen dignoscenda.

160. Rhipidonema sericeum Sw. — Sacc., l. c. f. 688.
Hab. Ad truncos muscosos in sylvis prope *Apiahy*, Aest. 1881 (sine n.).

161. Rhipidonema spongiosum B. et C. — Sacc., l. c. f. 689.
Hab. Ad caudices arborum inter muscos in sylvis prope *Apiahy*, Aut. 1881 (sine n.).
Obs. Haec species etiam in collectione guaranitica Cl. *Balansae*, sub n. 4097 ex *Guarapí*, adest.

CLAVARIEAE Cda.

162. Clavaria Puiggarii Speg. — Sacc., l. c. f. 697.
Hab. Ad terram in umbrosis prope *Apiahy*, Aut. 1881 (sine n.).

163. Clavaria abietina Pers.? — Sacc., l. c. f. 701.
Hab. Ad schidias ligneas terra obovolutas in sylvis prope *Apiahy*, Apr. 1888 (sine n.).
Obs. Specimina brasiliensia vix a typo recedunt statura minore, trunco ramisque crassioribus dense breviterque ramoso-fastigiatis ac vegetatione subepixyla! Sporae tamen desunt.

164. Clavaria pyxidata Pers. — Sacc., l. c. f. 698.
Hab. Ad truncos putrescentes mucidos in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2866).

165. Calocera platyceras Speg. (n. sp.)
Diag. Subsolitaria, succineo-fulva; stipites erecti subteretes glabri apice simplices v. bifidi, late tenuiterque attenuato-spathulati v. flabellati, pallidiores.
Hab. Ad ramos decorticatos putrescentes in sylvis prope *Apiahy*, Jun. 1888 (sine n.).
Obs. Stipites solitarii v. hinc inde laxe gregarii erecti recti (5–10''' alt. × 0,7–1''' crs.) sursum subcompressi subpellucidi e succineo pallescenti-fulvi glabri, deorsum subteretes opaci subfuscescentes saepeque minute cinereo-pulverulenti, base abrupte dilatatulo-adfixi, apice simplices v. bifidi, abrupte in pileo tenuiter tremelloideo-membranaceo pallescente pellucido spathulato v. suborbiculari-flabellato (3–4''' alt. × 2-5''' lt.), verticali, margine obtusiusculo integro v. repando-sublobato glaberrimo expansi; sporae non visae.

166. Calocera Puiggarii Speg. (n. sp.)
Diag. Laxe gregaria v. sparsa; stipites erecti glabri lineares simplices v. fusoideo-teretes tremelloidei subsuccinei apice acuti fusco-purpurascentes deorsum pallidiores, base albescentes, subiculo orbiculatim dilatato submucedineo albo adfixi.

Hab. In cortice v. ligno mucido putrescente in sylvis prope *Apiahy*, Jul. 1888 (sub n. 2903).

Obs. Stipites sparsi v. hinc inde laxe gregarii glaberrimi laevissimi erecti recti v. flexuosuli graciles (5-7‴ lg. × 0,5-0,6‴ crs.) simplices v. ad tertium inferum bifidi e terete fusoidei, apice obtuse acutati fusco-purpurei, medio e succineo fulvescentes v. pallescentes, deorsum attenuati albescentes base truncati, mycelio orbiculatim expanso, maculam candidam (1-2‴ lt.) furfurellam subdetersilem efficiente radicati ; sporae non visae. Species pulchella habitu *C. foveolari* Lév. simillima, foveola basali tamen deficiente recedens, *C. albipedi* Mntgn. cognata etiam, colore purpurascente abhorrens ; an varietates unius speciei omnes tres citatae tantum ?

167. Pterula secundiramea (Lév.?) Speg. — Sacc., l. c. f. 716 (sub *Clavaria*).

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1881 (sub n. 1487).

Obs. Stipites quandoque solitarii quandoque e base communi coespitosi v. brevissime subfasciculati, filiformes erecti, base recti, sursum incurvuli (10-20‴ lg. × 0,3-0,5‴ crs.) deorsum fusci, caeterum pallescenti-rufescentes v. carnei (in sicco tantum ?) opaci glabri laeves rigiduli, laxe alterne v. subopposite ramulosi, ramulis (5-10‴ lg.) patentibus, antice attenuato-acutatis, omnibus secundis, apice rectis v. incurvulis simplicibus v. rarius laxe sparseque ramululosis. Species pulchella, saepius coespitosa, dense comata intricato-ramulosa, ramulis secundis mox dignoscenda.

TREMELLINEAE Fr.

168. Hirneola auricula-judae (L.) Brk. — Sacc., l. c. f. 766.

Hab. Ad truncos adhuc vivos arbuscularum in dumetis prope *Apiahy*, Aut. 1881 (sub n. 1538).

169. Hirneola lancicula Mntgn. — Sacc., l. c. f. 770.
Hab. Ad corticem putrescentem mucidum in sylvis prope *Apiahy*, Apr. 1881 (sub n. 1538).
Obs. Cupulae sparsae (1-4''' lt.) tenuissime membranaceae, dorso plus minusve late adfixae, margine subinvolutae integrae acutae subpellucidae e fulvo succineae extus intusque glaberrimae, contextu prosenchymatico-septulato marginem versus subparenchymatico succineo. A typo vix colore magis pallido recedit.

170. Tremella lutescens Pers. — Sacc., l. c. f. 781.
Hab. Ad ramos dejectos putrescentes prope *Apiahy*, Jun. 1881 (sine n.).

171. Tremella mesenterica Retz. — Sacc., l. c. f. 783.
Hab. Ad ramos decorticatos putrescentes in hortis prope *Apiahy*, Apr. 1888 (sub n. 2387).

172. Tremella gummaeformis Speg. (n. sp.)
Diag. E rimis erumpens, late mucoso-diffluens gyroso-undulata pellucida rufo-ferruginea laevis glabra; sporae ellipsoideae v. ovato-subglobosae hyalinae.
Hab. Ad palos putrescentes in hortis prope *Apiahy*, Aut. 1881 (sub n. 1566-1652).
Obs. Species pulcherrima, e rimis corticis tuberculoso-erumpens (2-20''' lt.), undulato-gyrosa sublobata laevissima glaberrima, mox mucoso-diffluens, obscure rufo-ferruginea subnitens; basidia non visa; sporae ex ovato subglobosae (10-12 μ dm.) hyalinae laeves, dense minuteque granuloso-farctae. An prioris forma senescens tantum?

173. Hormomyces pezizoideus Speg. (n. sp.)

Diag. Sparsus v. laxe gregarius, rufescenti-succineus parvulus primo subglobosus dein umbilicato-cupulatus obtuseque rotundato-marginatus; sporae globosae hyalinae catenulatae.

Hab. Ad culmos putrescentes *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Conceptacula sparsa v. hinc inde plus minusve dense gregaria saepe subconfluentia in vivo tremelloidea mollia, in sicco dura subcornea, primo globulosa dein cupulato-collapsa (1–5''' dm.) margine obtusissime rotundata integra glaberrima ex opaco subpellucida fulva v. rufescenti-succinea; sporae globulosae (1,5–2 μ) hyalinae laeves in catenulas praelongas (40-100 μ lg.) ramulosas digestae.

GASTEROMYCETAE Willd.

PHALLOIDEAE Fr.

174. Clathrus australis Speg. — Phall. arg. n. 7.

Hab. Ad terram muscosam arenosam prope *Apiahy*, Apr. 1881 (sine n.).

Obs. Species *Cl. (Laternea) triscapo* Turp. affinis, sed ramis 4 bene distinctis atque sporis cylindraceo-ellipsoideis recedens.

175. Clathrus columnatus Bosch. — Fisch. in Sacc., Syll. fung. v. VII, prt. I, f. 18.

Hab. Ad terram sabulosam in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Sporae ellipsoideo-cylindraceae (4-6 × 1,5 μ) chlorinae.

176. Clathrus crispus Turp. — Fisch. in Sacc., l. c. f. 20.
Hab. Ad terram inter folia sternata in sylvaticis prope *Apiahy*, Apr. 1888 (sine n.).
Obs. Specimina valde obliterata ac vix determinanda; sporae ellipsoideo-cylindraceae (4–5 × 2–2,5 μ) chlorinulae.

177. Calathiscus Puiggarii Speg. — Fisch. in Sacc., l. c. f. 24.
Hab. Ad terram sabulosam inter folia dejecta putrescentia in sylvis prope *Apiahy*, Apr. 1881 (sine n.).
Obs. Mihi ex eodem loco Phalloidearum species duo nondum evolutae adsunt, sed non determinabiles etsi certe a prioribus distinctae.

NIDULARIACEAE Fr.

178. Cyathus Montagnei Tul.
Var. *brasiliensis* Speg. — DTon. in Sacc., l. c. f. 34.
Hab. Ad ramenta coacervata putrescentia *Graminacearum* in dumetis prope *Apiahy*, Aut. 1881 (sub n. 1542).

179. Cyathus Puiggarii Speg. (n. sp.)
Diag. Olla; peridium obconicum extus fusco-fulvum longe denseque strigoso-hirsutum, epiphragmate tenui albo, ore integerrimo, intus laevissimum plumbeo-nitens; sporangiola lenticulari-rhomboidea atro-plumbea laevia subnitentia; sporae ellipsoideae crasse tunicatae hyalinae.
Hab. In fimo vetusto putrescente in pratis prope *Apiahy*, Apr. 1888 (sub n. 2336).
Obs. Peridia hinc inde 4–20-aggregata subconstipata, mycelio vix evoluto fibrilloso per matricem latiuscule profundeque excurrente insidentia, tenuiter membranaceo-papyracea rigidula, primo obovata apice rotundatula ore

parvulo epiphragmate tenuissimo albo mox evanescente donato, dein calyciformia (5-6''' alt. × 4-5''' lt. or.), superne truncata ore late aperto integerrimo, extus ubique longiuscule dense patuleque hirsuto-strigosa, in vivo testaceo-rufescentia, in sicco subcinerascenti-testacea, intus plumbea laevissima glaberrima subnitentia; sporangiola 12-16 in quoque peridio, dense constipata e discoideo rhomboidea (2''' dm.) crassiuscule lenticularia (1,3-1,5''' crs.) e mutua pressione applanato-angulosa, obscure plumbea laevia subnitentia, non umbilicata, funiculo albo brevi crassiusculo donata, pulpa alba farcta; sporae dense constipatae ellipticae v. ovatae (30 × 20 μ) crassiuscule tunicatae, laeves hyalinae. Species pulchella *C. stercoreo* (Schw.) DTn. peraffinis et facile ejusdem varietatem tantum sistens.

LYCOPERDACEAE Ehrnb

180. Bovista Cisneroi Speg. — DTn. in Sacc., l. c. f. 102.

Hab. Ad terram sabulosam in pratis prope *Apiahy*, Jul. 1888 (sine n.).

Obs. Specimina subimmatura; peridia sessilia, flaccida, subglobosa (20-30''' dm.) base interdum plus minusve plicata, tunica externa deficiente, interna tenuissima crocea v. aurantio-lutea, vix in parte supera subolivascentia atque minutissime adpresseque furfurella, ad apicem osculo parvulo irregulari dehiscentia, inferne radice tortuosula cylindracea longiuscula fusco-flavescente instructa; gleba gossypina compacta citrina; sporae adhuc immaturae. Species praedistincta odorem corii, *Bulgaro* vocati, pollens atque chartam colore aurantio tingens.

181. Bovista? Puiggarii Speg. (n. sp.)

Diag. Peridia gregaria globoso-obovata parvula laevia testaceo-rosea pruinulosa, inferne pallescentia plicatula; gleba cinerascenti-olivascens subcelluloso-squamulosa elastica peridio adnata; sporae globosae spinulosae ecaudatae chlorinae.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 1657).

Obs. Peridia dense hinc inde 3–20-aggregato-constipata, obovata v. subglobosa (10–15''' dm.) e mutua pressione saepe angulosa, superne rotundata laevia, inferne subcuneata plicatula subsessilia, tunica externa deficiente, interna membranacea rigidula, sursum fusco-testacea v. cinerascenti-testacea obsoleteque purpurascente, deorsum pallescenti-cinerascente, ubique tactu atque visu minutissime pruinuloso-velutina, mycelio crassiuscule denseque fibrilloso-strigoso in matricem penetrante candido donata; basis sterilis nulla; gleba e base peridii radians compactiuscula cinerascens v. cinerascenti-olivascens dense squamuloso-spongiosula (an immatura?) pulvere sporifero parco repleta; sporae globosae (4–5 μ dm.), minute denseque spinulosae ecaudatae, chlorinae. Specimina nonnulla in base a larva cujusdam comedita excavataque; an huc *Coilomyces* B. et C.?

182. Lycoperdon brasiliense Speg. (n. sp.)

Diag. Peridia turbinata sordide tabacino-subpurpurascentia superne obtuse rotundata dense minuteque puberula laevia glabra sessilia, flaccidissima; gleba lutescenti- v. fulvescenti-tabacina gossypina, cum base sterili fusco-subcarnea grosse cellulosa continua; sporae globosae ecaudatae flavae.

Hab. Ad terram sabulosam in pratis prope *Apiahy*, Jul. 1888 (sine n.).

Obs. Peridia saepius solitaria obovato-turbinata (25–30''' alt. × 30–50''' dm.) sursum obtusissime rotundata, deorsum

cuneata, basi abrupte radicato-rotundata, colore *cupri nitidi*, seu e fulvo v. tabacino leniter aurantio-purpurascentia, superne minutissime pruinuloso-furfuracea, pruinula tabacina, inferne glabrescentia non v. vix subnitentia per aetatem irregulariter lacero-dehiscentia; basis sterilis dimidium v. tertium inferum peridii occupans e cellulis majusculis pallide fulvo-roseis, fibrillis tenuissimis e cinerascente tabacinis gossypinis repletis efformata, cum gleba continua; gleba mollissima elastica compactiuscula dense gossypina, ubique peridio adnata pulchre intenseque fulvo-tabacina, pulvere sporigero subcroceo parco farcta; sporae globosae (4 μ) ecaudatae laeves (an minutissime laxissimeque rugulosae?), grosse 1-guttulatae fulvo-flavidae.

183. Lycoperdon pseudopyriforme Speg. (n. sp.)

Diag. Peridium clavato-pyriforme superne rotundatum, irregulariter dehiscens, cinereum pruinulosum v. glabratum, base sterili magna olivascente grosse cellulosa a gleba plane discreta donatum; capillitium molliusculum plumbeum; sporae globosae papillosae chlorinae.

Hab. Ad terram humosam inter *Gramina* in pratis prope *Apiahy*, Aut. 1888 (sub n. 1656).

Obs. Peridia clavato-pyriformia (30''' alt.) in parte supera subglobosa (14-16''' dm.), tunica externa orbata, interna subcrassiuscula membranacea flaccidula, areolis minutis (0,5''' dm.) densis rotundis ex argenteo cinereis subnitentibus granulis fuscis immixtis vestita, in parte infera turbinato-cuneata (10-15''' alt. × 5-10''' dm.) pallide sordideque albescenti-pallescentia v. subcinerascentia, minute irregulariterque pruinuloso-granulosa; basis sterilis grosse spongioso-cellulosa compactiuscula, a gleba plane discreta fere septo membranaceo separata; gleba cinerascenti-plumbea, gossypinula pulvere sporifero concolore parcissimo inspersa, a base sterili atque tunica peridii

discreta v. facillime separabilis ; sporae globosae (4 μ dm.), laxe minutissimeque papillulosae ecaudatae v. vix papillula magis protuberante praeditae e cinereo chlorinae. Species pulchella habitu externo cum *L. pyriformi* Schaeff. perfecte conveniens, sed gleba a base sterili discreta *L. hyemali* Bull. accedens.

184. Lycoperdon tropicale Speg. (n. sp.)

Diag. Peridium obovato-turbinatum majusculum fulvo-testaceum, glabrum irregulariter dehiscens; gleba grumoso-gossypina fulvo-cervina cum base sterili gossypino-constipata flavo-virescente continua; sporae globosae subecaudatae verruculosae chlorinae.

Hab. Ad terram humosam inter muscos in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Peridia solitaria e globoso v. ovoideo turbinata (60-70''' alt. × 30-40''' dm.) cortice exteriore plane orbata, superne rotundata laevia, inferne cuneata ac plicatula, cortice interno tenuissimo membranaceo flaccido rimuloso, gleba adnato ac cum illa mox evanescente, testaceo v. fulvo-testaceo donata; gleba gossypino-grumosa compactiuscula, cortice concolor cum base sterili continua; basis sterilis pulchre vivideque e flavo virescens v. olivascens, cortice glebaque adnata, gossypina compactiuscula (non spongioso-cellulosa) elastica, dimidiam peridii inferam partem occupans; sporae globosae (4 μ) minute laxissimeque papillulosae, cauda brevissima donatae pallide olivascentes. Species pulchella colore basis sterilis praecipue mox dignoscenda.

185. Arachnion album Schw. — DTn. in Sacc., l. c. f. 151.

Hab. Ad terram inter *Gramina* vulgata in pratis prope *Apiahy*, Apr. 1888 (sub n. 2877).

Obs. Sporae e globoso ovoideae (4-5 × 3-4 μ) grosse 1-guttu-

latae, saepe cauda eorum diametrum aequante recta donatae.

MYXOMYCETEAE Wallr.

186. Badhamia melanospora Speg. — Berl. in Sacc., l. c. f. 335.

Hab. Ad corticem putrescentem palorum in hortis, *Apiahy*, Mart. 1888 (sub n. 2868).

Obs. Tunica anhista hyalina calcarea extus laevis intus e capillitio calcareo dense gossypinula; sporae e fuligineo atrae opacae globosae (15-16 μ dm.) laeves, sed sub lente validissima in senectute saepius minutissime densissimeque reticulato-granulosae.

187. Badhamia ? pulcherrima Speg. (n. sp.)

Diag. Peridia dense aggregata cylindraceo-ellipsoidea albo-cinerea, hypothallo arachnoideo insidentia, tunica duplice vestita; tubuli simplices brevissimi hyalini calcarei; sporae globosae laeves atro-fuligineae.

Hab. Ad corticem putrescentem arborum in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2754).

Obs. Peridia hypothallo tenuissimo albo arachnoideo-ramuloso insidentia, cylindracea, subobovata v. cylindraceo-ellipsoidea (1-1,2''' alt. × 0,5-0,6''' dm.) utrinque rotundata stipitibus plus minusve evolutis tenuissimis albis flaccidis saepe fasciculato-connatis suffulta, dense gregaria, acervulos orbiculari-expansos (10-100''' dm.) efficientia, primo candidissima laevia, dein tunica externa frustulatim secedente, interna denudata tenuissima cinerea gleba arcte adnata tantum vestita; gleba compactiuscula aterrima irregulariter evanescens; capillitium omnino calcareum e tubulis brevissimis crassis difformibus reticulato-connexis hyalinis, nodulis triangulari-applanatis, efformatum; columella nulla; sporae globosae (10-15 μ dm.)

laeves, opace atro-fuligineae obsolete subviolascentes; granula calcarea alba numerosa minuta (1–2,5 μ dm.). Species pulcherrima peridiorum fabrica distinctissima et facile a genere *Badhamia* separanda.

188. Chondrioderma Puiggarii Speg. (n. sp.)

Diag. Leangium?; peridia e globoso ellipsoidea sessilia gregaria, cortice rufo-fulvo frustulatim evanescente tecta; gleba fusco-fuliginea; capillitium parcum hyalinum, columella destitum; sporae asperulae fusco-fumosae.

Hab. Ad folia viva *Leucobryi longifolii* in sylvis prope *Apiahy*, Oct. 1888 (sub n. 2917).

Obs. Peridia sessilia hinc inde plus minusve densiuscule gregaria non confluentia, irregulariter e globoso ellipsoidea (400–600 μ lg. × 250–400 μ alt. et lt.) pulchre rufo-fulva v. per aetatem fusco-lateritia opaca glabra laevia cortice unico fragili, sub lente anhisto granuloso-reticulato flavido, mox frustulatim evanescente tecta, glebaque compactiuscula e ferrugineo fusca repleta; columella nulla; flocci hyalini parci subdichotomico-furcati, nodulis late triangulari-applanatis; sporae globosae (8–10 μ dm.) minutissime denseque granuloso-asperulae e fusco fuligineae perdilute obsoleteque vinosae.

189. Didymium squamulosum (A. et S.) Fr.

Var. *leucopus* Fr. — Berl. in Sacc., l. c. f. 377.

Hab. Ad folia viva emortua *Graminacearum* in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2718).

Obs. Sporae globosae (7-8 μ dm.) laeves.

190. Didymium effusum (Lk.) Fr. — Berl. in Sacc., l. c. f. 378.

Hab. Ad folia emortua putrescentia *Graminacearum* in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2563).

191. Didymium farinaceum Schrad. — Berl. in Sacc., l. c. f. 381.

Hab. Ad folia viva *Leucobryi longifolii* in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Cristalla externa superficialia stellata hyalina; sporae globosae (8-10 μ dm.) laeves fusco-violascentes.

192. Diachea leucopoda (Bull.) Rost. — Berl. in Sacc., l. c. f. 387.

Hab. Ad folia *Filicum* adhuc viva in sylvis prope *Apiahy*, per Aut. 1881-88 (sub n. 1581-2783).

Obs. Sporae globosae (8-10 μ dm.) laeves fusco-vinosae.

193. Stemonitis fusca Roth. — Berl. in Sacc., l. c. f. 397.

Hab. Ad cortices radices atque ramenta herbacea putrescentia in sylvis prope *Apiahy*, per Aut. 1881-88 (sub n. 1452-2603).

Obs. Sporae globosae (7-8 μ dm.) laeves.

194. Stemonitis fluminensis Speg. — Berl. in Sacc., l. c. f. 398.

Hab. Ad corticem putrescentem in sylvis uliginosis prope *Apiahy*, Jul. 1881 (sine n.).

195. Rostafinskia australis Speg. — Berl. in Sacc., l. c. f. 403.

Hab. Ad cortices dejectos putrescentes arborum in sylvis uliginosis prope *Apiahy*, Aut. 1881 (sub n. 1549).

Obs. Aetalia primo mucosa flavida, dein carnosula virescenti-flavida, postremo gossypinulo-compactiuscula pulchre violacea; sporae e globoso ellipsoideae v. ovoideae (6-9 × 4-6 μ) laeves fusco-subviolascentes.

196. Cornuvia minutula Speg. (n. sp.)

Diag. Peridia ovoidea stipitata purpureo-fusca laevia opaca; capillitium reticulatum, tubulis spiraliter 4-teniolatis, flavescens; sporae globosae laeves flavescentes.

Hab. Ad terram pinguem muscosam (an in radicibus putrescentibus ?) in pratis prope *Apiahy,* Aut. 1881 (sub n. 1663).

Obs. Peridia subglobosa v. pyriformia (0,5–0,6''' dm.) fusco-purpurascentia laevia glabra cortice tenacello persistente, per aetatem frustulatim evanescente, tecta, deorsum in stipite longiusculo ac tenui (2–3''' lg. × 120–150 μ crs.) e coccineo roseo recto laevi producta; capillitium dense constipatum fusco-flavescens, e tubulis dense reticulato-connexis teretibus (5–6 μ crs.), taeniolis 4 spiraliter evolutis donatis laevissimis non papillosis flavidis compositum; sporae globosae (6–7 μ dm.) episporio tenui laevi (an minutissime granuloso?) vestitae, e hyalino flavescentes. Species pusilla humigena, habitu *Stilbi* cujusdam fere donata.

197. Arcyria decipiens Brk. — Berl. in Sacc., l. c. f. 432.
Cornuvia leocarpoides Speg. — Fung. arg. pug. IV, n. 244.

Hab. Ad ligna decorticata putrescentia in hortis prope *Apiahy*, Aut. 1881 (sub n. 1653).

198. Arcyria cinerea (Bull.) Schm. — Berl. in Sacc., l. c. f. 427.

Hab. Ad muscos adhuc vivos in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2880).

Obs. Calyculus minute costatus; tubuli capillitii fere omnes aequales (3–4 μ crs.) spinulosi, cinereo-olivascentes; sporae globosae (5–6 μ dm.) laeves subhyalinae.

199. Hemiarcyria melanopeziza Speg. — Berl. in Sacc., l. c. f. 449.

Hab. Ad corticem putrescentem in sylvis uliginosis prope *Apiahy*, Jun. 1881 (sine n.).

PHYCOMYCETEAE DBy.

200. Cystopus brasiliensis Speg. (n. sp.)

Diag. Acervuli hypophylli minuti albi; conidia catenulata omnia aequalia lenticularia hyalina.

Hab. Ad folia viva *Eupatorii* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2483).

Obs. Maculae amphigenae minutae (1-2''' dm.) saepe confluentes subindeterminatae, superne obscure fusco-purpurascentes, inferne sordide subferrugineae; acervuli hypophylli irregulariter suborbiculares minuti (0,5-1''' dm.) diu epidermide velati dein erumpentes subpulverulenti albi, in maculis solitarii v. 2–3-gregarii saepeque confluentes; conidia catenulata omnia forma magnitudineque aequalia e fronte discoidea (20 μ dm.) e latere lenticularia (10–14 μ crs.) margineque crasse truncata, episporio hyalino crasso laevi vestitae; oosporae non visae. Species *C. trogopogoni* (Pers.) Schr. peraffinis, conidiis tamen lenticularibus atque omnibus aequalibus recedens.

USTILAGINEAE Tul.

201. Cintractia peribebuyensis Speg. — Fung. guar. pug. II, n. 26.

Hab. Ad basin pedunculorum inflorescentiae *Cyperi* cujusdam in uliginosis prope *Apiahy*, Aug. 1888 (sub n. 2875).

UREDINEAE Brogn.

202. Uromyces Holmbergii Speg. (n. sp.)
Diag. Hemiuromyces; sori amphigeni minuti tecti fuliginei; teleutosporae obovatae laeves stipite brevi fulvescente suffultae.
Hab. Ad folia viva *Mitracarpi* speciei cujusdam in herbosis prope *Apiahy*, Apr. 1888 (sub n. 2607).
Obs. Maculae nullae; sori teleutosporiferi amphigeni sparsi minuti (0,5-1''' dm.), uredosporiferis immixti, vix prominuli, epidermide integra diu velati, fusco-cinnamomei compactiusculi; teleutosporae dense constipatae, obovatae v. ellipsoideo-obovatae (35-40 $\times$ 26-30 μ), superne subtruncato-rotundatae, rarius late modiceque umbonatae, crasse tunicatae, continuae, non v. 1-guttulatae laeves subopace fuligineo-cinnamomeae, stipite recto breviusculo crassiusculo persistente pallide fulvescente (30-40 $\times$ 6-9 μ) suffultae, aparaphysatae. Ab *U. spermacoces* (Schw.) Thm. pedicello conspicue breviore recedere videtur.

203. Puccinia malvacearum Bert. — DTh. in Sacc., Syll. fung. vol. VII, p. II, f. 686.
Hab. Ad folia viva *Malvae* speciei cujusdam in hortis *Apiahy*, Aest. 1881 (sub n. 1547).
Obs. Teleutosporae pallide fulvae (50 $\times$ 20 μ) stipite longiusculo (60-70 $\times$ 5-7 μ) hyalino fultae.

204. Diorchidium Puiggarii Speg. (n. sp.)
Diag. Teleutosporae turbinatae fulvescentes loculis juxtapositis obovatis apice late rotundatis atque verrucosis, stipite longiusculo hyalino fultae.

Hab. Ad folia viva *Cassiae* speciei cujusdam in dumetis prope *Apiahy*, Aest. 1881 (sub n. 2713).

Obs. Maculae nullae v. pallescentes amphigenae indeterminatae; acervuli teleutosporici, uredosporicis commixti, in maculis v. hinc inde densiuscule gregarii hypo-(rarius epi-) phylli, irregulariter dispositi v. subconcentrici minutissimi (150-350 μ dm.) erumpenti-superficiales subcompactiusculi rufo-fulvi; teleutosporae bicellulares (20–30 × 20–28 μ), cellulis obovatis, antice rotundatis ibique tantum dense minuteque papillosis atque plus minusve crassiuscule tunicatis, deorsum laevibus, pulchre e subfuligineo rufo-fulvae, stipite longiusculo tenui (50–60 × 5 μ), hyalino suffultae. In acervulorum margine paraphyses minutae (25–30 × 7–8 μ) saepe adsunt.

205. Phragmidium subcorticium (Schrnk) Wnt. —DTn. in Sacc., l. c. f. 746.

Hab. Ad folia viva *Rosae* cujusdam cultae in hortis, *Apiahy*, Oct. 1888 (sub n. 2933).

Obs. Teleutosporae cylindraceae non v. lenissime superne crassiores utrinque obtuse rotundatae (60–80 × 30 μ), primo rufo-fuligineae pellucidae 6–7-septatae, ad septa non v. vix subconstristae, dein atrae opacae, apice mucrone conoideo obtusiuscule acutato (6-10 μ lg.) auctae, granulis hyalinis laxe adspersae, base stipite saepius recto longiusculo (100–120 μ), dimidia parte supera cylindracea (7–9 μ crass.) farcta, dimidia parte infera abrupte incrassata (25–30 μ) medioque saepius leniter coarctata saepeque canaliculo protoplamate aureo donata efformato suffultae. Uredosporae obovatae (20–24 × 18–20 μ) dense minute papillosae, episporio crasso hyalino, protoplamate granuloso aureo.

206. Ravenelia fimbriata Speg. (n. sp.)

Diag. Hemiravenelia; acervuli hypophylli punctiformes rufi;

teleutosporae hemisphaerico-depressae, 5-6-cellulas in omni directione praebentes, fulvae, margine inferiore hyalino-appendiculatae, stipite hyalino brevissimo fultae.

Hab. Ad folia viva *Sesbaniae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2765).

Obs. Maculae nullae v. epiphyllae vix manifestae (3-5''' dm.) indeterminatae pallescentes; acervuli teleutosporici uredosporicis commixti in maculis densiuscule gregarii inordinati hemisphaerico-orbiculares minuti (200-400 μ), erumpenti-subsuperficiales sordide rufo-fulvi; teleutosporae superne hemisphaericae (100-110 μ dm. × 60-70 μ crs.) inferne applanato-concaviusculae, margine obtusae, 30-60-cellulares, cellulis exagonis (10-12 μ dm.) dissepimentis subcrassiusculis, pulchre fulvescentes, in parte infera ad marginem appendicibus 8-16 subcylindricis obtusis hyalinis (10-25 × 3-4 μ) ornatae, stipite brevissimo crassoque (25-30 × 15-20 μ) hyalino fultae.

207. Uredo fimbriata Speg. (n. sp.)

Diag. Acervuli epiphylli erumpentes minuti rufi; uredosporae subellipsoideae laeves hyalino-melleae.

Hab. Ad folia viva *Sesbaniae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2765).

Obs. Maculae nullae v. epiphyllae orbiculares (2-5''' dm.) indeterminatae vix pallescentes; acervuli uredosporici cum teleutosporicis commixti minuti (120-180 μ dm.) vix papillato-prominuli fulvi erumpentes; uredosporae e globoso v. ovoideo ellipsoideae (12-15 × 10-12 μ) non v. 1-guttulatae, episporio tenui laevi v. minute subruguloso-papilluloso donatae, e hyalino pallidissime melleae. Status uredosporicus *Raveneliae fimbriatae* Sp.

208. Uredo Holmbergii Speg. — DTn. in Sacc., l. c. f. 850.

Hab. Ad folia viva *Mitracarpi* speciei cujusdam in herbosis prope *Apiahy*, Apr. 1888 (sub n. 2607).

Obs. Uredosporae e globoso obovatae (28–30 × 20–24 μ) verrucoso-spinulosae fuligineae ; status uredosporicus *Uromycetis Holmbergii* Speg.

209. Uredo microtheles Speg. (n. sp.)
Diag. Acervuli hypophylli minuti ferruginei ; uredosporae globosae, verruculosae fulvae.
Hab. Ad folia viva *Desmodii* speciei cujusdam in herbosis prope *Apiahy*, Aest. 1888 (sub n. 2720).
Obs. Maculae amphigenae irregulares indeterminatae pallescentes ; acervuli hypo-(rarius epi-) phylli, in maculis densiuscule gregarii pusilli (150–250 μ dm.) vix prominuli erumpentes subpulverulenti fulvi ; uredosporae globosae (17–18 μ dm.), episporio crassiusculo minute denseque spinuloso-verruculoso donatae, non v. 1-guttulatae, nubiloso-farctae fulvescentes.

210. Uredo Puiggarii Speg. (n. sp.)
Diag. Acervuli minuti fulvo-ferruginei ; uredosporae subglobosae verruculosae fulvae.
Hab. Ad folia viva *Cassiae* speciei cujusdam in dumetis prope *Apiahy*, Aest. 1888 (sub n. 2713).
Obs. Maculae amphigenae pallescentes indeterminatae ; acervuli hypophylli cum teleutosporicis commixti, pusilli (120–150 μ dm.) vix prominuli, erumpentes pallide fulvo-ferruginei ; uredosporae globosae v. subellipsoideae (20–22 × 18–20 μ), episporio tenuiusculo dense minuteque verruculoso-papilloso donatae, non v. 1-guttulatae, nubiloso-farctae, pallide fulvae ; status uredosporicus *Diorchidii Puiggarii* Speg.

211. Uredo appendiculata Pers. — DTn. in Sacc., l. c. f. 535.
Hab. Ad folia viva *Phaseoli* speciei cujusdam in hortis prope *Apiahy*, Aest. 1888 (sub n. 2461).
Obs. Uredosporae obovatae v. subglobosae (20-24 × 18-22 μ),

episporio tenui dense minuteque verruculoso-spinuloso vestitae, pallide fulvae.

212. Uredo? subhyalina Speg. (n. sp.)

Diag. Acervuli petiolicoli v. neurophili pallide aurantiaci minuti; uredosporae subglobosae episporio laevi hyalino protoplasmate nubiloso flavescente donatae.

Hab. Ad folia viva *Desmodii* speciei cujusdam in pratis *Apiahy*, Aut. 1881 (sine n.).

Obs. Maculae nullae; acervuli in petiolis dense gregarii v. in nervis ad hypophyllum densiuscule seriati, matrice non v. vix incrassatula innati, difformes saepe confluentes (200–250 μ dm.), parce prominuli, erumpentes, epidermide lacerata subdealbata diu cincti, pallide aurantiaci, *aecidium* pusillum simulantes; uredoporae globosae v. ellipsoideae, e mutua pressione obtuse angulosae (18–24 × 18-20 μ), episporio hyalino tenui laevi vestitae, protoplasmate flavescente nubiloso farctae. An *Coleosporium*?

PYRENOMYCETEAE (Fr.) DNtrs.

PERISPORIACEAE Fr.

213. Eurotium? pseudonectria Speg. (n. sp.)

Diag. Perithecia superficialia globosa minuta ostiolato-papillulata, pallide flava, floccis hyalinis radiantibus cincta; asci globosi mox diffluentes; sporidia globosa verruculosa hyalina.

Hab. Ad folia viva coriacea plantae ignotae cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2381).

Obs. Perithecia hinc inde laxe aggregata pusilla (80-120 μ dm.) e globoso ovoidea superne minute papillato-ostio-

lata, pallide e fulvo flavida glabra laevia, base hyphis tenerrimis paucis radiantibus (100–150 × 3–4 μ) continuis simplicibus cincta, anhista?; asci globosi (15–18 μ dm.) mox diffluentes, octospori; sporidia globosa v. e mutua pressione obsolete angulosa, laxe minuteque verruculosa hyalina, episporio per aetatem irregulariter dehiscente ac endosporam sphaericam laevem liberante. Species pulchella natura et facie *Nectriaceis* adscribenda! An huc *Pisomyxa rhacodiodes* Cda, quae tamen floccis radiantibus atris (an perisporiaceae cujusdam hospitantis?) sporidiisque fuscis (vetustis?) recedit?

214. Dimerosporium guarapiense Speg. — Fung. guar. pug. II, n. 44.

Hab. In *Perisporiacea* quadam ad folia viva *Myrtaceae* ignotae, prope *Apiahy*, Aest. 1888 (sub n. 1699).

215. Dimerosporium solanicolum (B. et C.) Speg. — Fung. guar. pug. II, n. 45.

Hab. In *Perisporiacea* quadam ad folia viva *Solani boerhaviaefolii*, Aut. 1888 (sub. n. 2861).

Obs. Perithecia astoma globosa (80–100 μ dm).

216. Dimerosporium asterinarum Speg. (n. sp.)

Diag. Perithecia astoma globosa, pilis paucis circinatis apice integris acutis pallidioribusque inspersa; asci obclavulati parce paraphysati; sporidia subcylindracea pallide olivacea.

Hab. Ad folia viva plantae ignotae in *Asterinis* parasitans, prope *Apiahy*, Aut. 1881 (sub n. 1625-1639).

Obs. Perithecia epiphylla hinc inde plus minusve dense gregaria, hypothallo fibrosulo subiculum *Asterinarum* incrustante insidentia, atra globosa (80-100 μ dm.), setulis olivaceis paucis (8–20) divaricatis (30-50 × 4-5 μ), eximie 1-v. 2-circinatis, sursum attenuatis apice integris acu-

tiusculis inspersa, tenui membranacea, contextu parenchymatico olivaceo; asci obclavulati (50-60 × 14-18 μ), antice truncato-rotundati subincrassato-tunicati, postice brevissime crasseque stipitati, paraphysibus paucis filiformibus non v. septulatis ac subramulosis obvallati octospori; sporidia 2-v. 3-sticha, cylindracea, recta v. vix inaequilateralia (18-20 × 4-5 μ) utrinque obtusiuscula, medio 1-septato-constrictula, primo hyalina 4-guttulata dein pallide olivacea. Stylosporae quoque fusoideae (20-22 × 2-2,5 μ) v. obclavulatae, chlorinae continuae saepe adsunt. An huc *Asterina Wrightii* B. et C.?

217. Dimerosporium Puiggarii Speg. (n. sp.)

Diag. Pulvinuli non parasitici parvi atri sparsi; perithecia aggregata globosa astoma hyphis radiantibus fuligineis cincta; asci obclavati aparaphysati; sporidia subclavulata primo hyalina dein chlorinula.

Hab. Ad folia viva *Senecionis* cujusdam in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2586).

Obs. Maculae amphigenae pallescentes suborbiculares (3-5''' dm.) indeterminatae, centro saepe fuscescentes; perithecia epiphylla in maculis irregulariter denseque aggregata v. subcircinata, globosa (80-90 μ dm.) atra, in sicco collabescentia glabra, base hyphis radiantibus atris opacis flexuosis cincta, astoma, membranacea, contextu parenchymatico densiusculo fuligineo; asci obclavulati (30 × 7 μ) antice subtruncato-rotundati non v. vix incrassati, postice breviter pedicellati aparaphysati octospori; sporidia 2-3-sticha, elliptica v. subfusiformia, non v. vix subclavulata utrinque acutiuscula (9-10 × 3-3,5 μ) medio 1-septata parceque constricta, primo hyalina, loculis 2-blastibus, dein chlorinula (loculis 1-septatis?). Species sporis forte postremo 3-septatis *Asteridio* accedens.

218. Dimerosporium solare Speg. (n. sp.)

Diag. Pulvinuli non parasitici minutissimi atri sparsi; perithecia centro pulvinulorum constipata globosa hyphis radiantibus densis cincta; asci ovati aparaphysati; sporidia clavulata hyalina v. fumosa.

Hab. Ad folia viva *Trichiliae* v. *Xanthoxyli* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2470).

Obs. Maculae nullae; pulvinuli epiphylli minuti (0,5-1‴ dm.) sparsi; perithecia in pulvinulorum centro 3–12–constipata, globosa (90-120 μ) astoma glabra atra laevia, membranacea, contextu parenchymatico olivaceo-fuligineo donata, subiculo parco radiante ex hyphis tenuibus longiusculis gracilibus (60-150 × 3-5μ) septulatis pallide olivaceis efformato insidentia; asci ovati v. subsphaerici (35–40 × 25-30 μ) antice parce incrassato-tunicati, postice breviter crasseque pedicellati aparaphysati octospori; sporidia conglobata clavulata (16–18 × 5–6 μ), superne obtusa inferne acuta, medio 1-septata, parce constricta, prima hyalina dein fumosa (an postremo olivacea?).

219. Dimerosporium pulveraceum Speg. — Fung. arg. pug. IV, n. 118 (sub *Meliola)*.

Hab. Ad folia coriacea viva plantae ignotae in *Perisporiacea* quadam parasitans, *Apiahy*, Maj. 1881 (sub n. 1491).

Obs. Perithecia globulosa (50–80 μ dm.) astoma atra glabra membranacea, contextu parenchymatico olivaceo, hinc inde aggregata v. subsparsa, subiculo tenui fibrosulo mucedineo mycelium *Meliolarum* incrustante insidentia; asci obclavulati (30 × 12 μ) apice subtruncati crasseque tunicati, postice brevissime crasseque stipitati, aparaphysati octospori; sporidia 3-sticha v. subconglobata, subcylindracea utrinque acutiuscule rotundata (17–18 × 4–5 μ) medio 1-septata, non v. vix constricta, primo hyalina 1-guttulata, dein eguttulata chlorinula. Subiculum in l. c. descriptum ad *Meliolam* hospitantem pertinet.

220. DIMEROSPORIUM MICROSPORUM Speg. (n. sp.)

Diag. Parasitans; perithecia globosa astoma glabra; asci subcylindracei paraphysati; sporidia obovata pallide olivacea.

Hab. Ad folia plantae ignotae in *Meliola* quadam parasiticum prope *Apiahy*, Hiem. 1881 (sub n. 1612).

Obs. Hypothallus fibroso-mucedineus tenuissimus hyphas subiculi incrustans olivascens; perithecia sparsa v. hinc inde gregaria globosa minuta (80-100 μ) astoma atra, laevia, membranacea, contextu parenchymatico olivaceo parum distincto; asci cylindraceo-obclavati (28-30 × 7-8 μ) sursum subtruncato-rotundati, tunica modice incrassata, deorsum brevissime crasseque stipitati octospori, paraphysibus densis fluxilibus obvallati; sporidia 2-3-sticha obovata v. elliptico-obovata (7-9 × 3,5 μ) superne obtuse inferne acute rotundata, medio 1-septata non v. vix constricta, loculis subaequilongis, pallide olivacea.

221. DIMEROSPORIUM MELIOLICOLUM Speg. (n. sp.)

Diag. Parasitans; hypothallus mucedineus; perithecia globosa astoma glabra; asci obclavulati paraphysati; sporidia obovata pallide olivacea.

Hab. In *Meliola* quadam ad folia plantae indeterminatae prope *Apiahy*, Aut. 1881 (sine n.).

Obs. Hypothallus fibroso-mucedineus vix perspicuus tenuiter hyphas subiculi incrustans; perithecia hinc inde glomerulata globosa minuta (80-100 μ) astoma laevia atra membranacea, contextu parenchymatico olivaceo parum distincto; asci obclavati (30-35 × 8 μ) antice obtuse rotundati crassiusculeque tunicati, postice brevissime crasseque pedicellati, octospori, paraphysibus paucis filiformibus simplicibus v. ramulosis immixti; sporidia obovata, (10-12 × 4-4,5 μ) medio 1-septato-constrictula, loculis subaequilongis, infero graciliore, primo diu hyalina 4-blasta, dein eguttulata, pallide olivacea.

222. Dimerosporium? microstomum Speg. (n. sp.)

Diag. Non parasitans; hypothallus tenuissimus vix perspicuus; perithecia globosa densiuscule gregaria ostiolata glabra; asci cylindracei paraphysati; sporidia obovata pallide olivacea.

Hab. Ad folia languida *Sapindaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sub n. 1442–1507).

Obs. Hypothallus epiphyllus tenuissimus primo fibrillosus mox mucedineo-submembranaceus plus minusve late effusus (2-5''' lt.) olivascens, vix perspicuus epidermide arctiuscule adnatus; perithecia in hypothalli centro saepius densiuscule gregaria globosa v. subovoidea minuta (70-20 μ) atra glabra, laevia utrinque v. superne tantum umbonata, apice ostiolo latiusculo (25 μ dm.) impresso perforata; asci cylindracei (35–50 × 8–10 μ) sursum obtuse rotundati crassiusculeque tunicati, deorsum minute pedicellati octospori, non v. parce paraphysati; sporidia oblique v. subrecte disticha, obovata v. subclavulata (9-11 × 3-4 μ), superne obtuse inferne acute rotundata, medio 1-septata, parce constrictula, diu hyalina dein pallide olivacea.

223. Dimerosporium? lateritium Speg. (n. sp.)

Diag. Pheritecia in subiculo atro velutino constipata, globosa rubro-lateritia glabra astoma; asci pyriformes tunica fuscescente instructi paraphysati: sporidia didyma fuliginea.

Hab. Ad folia viva *Velloziae* in sylvis prope *Itabirâ do Campo* secus *Rio das Velhas*, Sept. 1887 (leg. Cl. I. Arechavaleta).

Obs. Subiculum (an proprium?) hypophyllum maculas atras velutinas irregulariter orbiculares (3-8''' dm.) efficiens, arctiuscule matrici adnatum pelliculoso-membranaceum, ex hyphis subopacis fuligineis (6 μ crs.) dense intricato-ramosis hyphopodiis destitutis efformatum, setulis erectis (150-250 × 6-7 μ) subopacis rufescenti-atris septulatis apice pellucidis integris vestitum; perithecia inter

setulas subiculi nidulantia fere abscondita, hinc inde sparsa v. gregaria, globulosa minuta (100–120 μ dm.) astoma e rubro lateritia glabra laevia, crassiuscule membranacea, contextu parenchymatico rufo-fulvo parum perspicuo donata; asci obovati v. pyriformes (80-90 × 50-60 μ) breviter crasseque stipitati, tunica ubique, sed apice praecipue, crassiuscula primo hyalina dein saepius rufescente vestiti, paraphysibus diffluentibus e chlorino fuscescentibus obvallati, octospori; sporidia conglobata elliptica v. obovata (35-40 × 20 μ), medio 1-septata non v. parce constricta, loculis subaequilongis, supero saepius grosse 1-guttulato, rufo-fuliginea. Species elegantissima *Parodiellae? melioloidi* (B. et C.) Wint. affinis, nisi identica, facillime novi generis inter *Nectriaceas* et *Perisporiaceas* medii typum sistens.

224. Asteridium clavisporum Speg. (n. sp.)

Diag. Amphigenum; hypothallus tenuissimus pelliculosus effusus non v. vix perspicuus; perithecia ovata pruinulosa v. glabra astoma laxe gregaria; asci clavati aparaphysati; sporidia cylindraceo-clavata, 3–5–septata, e chlorino fumosa.

Hab. Ad folia coriacea viva plantae ignotae prope *Apiahy*, Aest. 1888 (sub n. 2384).

Obs. Hypothallus amphigenus maculas parum perspicuas pallide olivaceas orbiculares (2–5‴ lt.) sparsas v. confluentes saepeque totum fere folium obtegentes efficiens, tenuissime pelliculosus arcte matrici adnatus, ex hyphis gracilibus (5–6 μ crs.) dense intertextis ac pseudoseptatis opposito-ramosis hyphopodiis destitutis pallide olivaceis efformatum; perithecia in maculis laxe 5-40-gregaria ovata v. subglobosa (150–180 μ dm.) astoma glabra v. pruinulosa fusco-olivacea coriacella, contextu indistincto olivascente; asci clavulati antice rotundati postice cuneato-attenuati (80 × 20 μ) breviter pedicellati aparaphysati octo-

spori ; sporidia cylindraceo-v. subfusoideo-clavulata (30-45 × 5-6 μ) superne obtuse, inferne acute rotundata, 3-(rarius 1-4-5-)-septata, ad septa non v. vix constricta recta, primo hyalina dein chlorino-fumosa.

225. Asteridium ? dispersum Speg. (n. sp.)

Diag. Hypothallus nullus ; perithecia hypophylla sparsa globosa astoma atra pilosula ; asci obclavati aparaphysati ; sporidia fusiformia 5-septata hyalina.

Hab. Ad folia viva *Pleromatis* speciei cujusdam in dumetis prope *Apiahy*, Jul. 1888 (sub n. 2485).

Obs. Perithecia inter lepides hypophyllas hinc inde solitaria superficialia atra in vivo globosa (120-150 μ) in sicco collabescentia astoma pilis divaricatis rectiusculis (50-150 × 5 μ) non v. septulatis pallide fuligineis apice integris pallidioribusque inspersa membranaceo-coriacella, contextu grosse parenchymatico olivaceo ; asci obclavati (65-75 × 12-14 μ) apice obtuse rotundati tenuiterque tunicati, basi pedicello brevi suffulti aparaphysati octospori ; sporidia 2-3-sticha elliptico-fusoidea (26-30 × 6 μ) utrinque obtusiuscule acutata recta v. leniter inaequilateralia 5-septata, ad septa non v. vix constricta hyalina. A genere *Acanthostigmate* vix peritheciis astomis recedit, an satis ?

226. Hyaloderma perpusillum Speg. (n. sp.)

Diag. Parasitans ; perithecia minutissima superne evanida ; asci elliptico-obclavati paraphysati ; sporidia linearia fusoidea arcuata pluriguttulata hyalina.

Hab. In *Perisporiacea* quadam ad folia viva *Myrtacearum* prope *Apiahy*, Hiem. 1881 (sub n. 1702).

Obs. Hypothallus tenuissimus mucedineus vix perspicuus incrustans ; perithecia sparsa v. hinc inde laxe gregaria globulosa (50-70 μ dm.) astoma glabra olivacea tenuissime membranacea superne anhista hyalina mox evanescens,

inferne indistincte subparenchymatica cupulatim persistentia; asci ellipsoidei v. obclavulati (18–20 × 6–7 μ) superne obtuse v. subtruncate rotundati crassiusculeque tunicati, inferne subattenuati brevissime crasseque pedicellati, octospori, paraphysibus filiformibus longioribus saepe ramulosis obvallati; sporidia lineari-fusoidea (14–18 × 1,5 μ) utrinque acuta arcuatula multiguttulata continua hyalina.

227. Meliola pulchella Speg. (n. sp.)

Diag. Subiculum tenuissimum effusum atrum, setulis paucis apice integris, hyphopodiis parcis pedicellatis subglobosis donatum; perithecia globosa glabra verruculosa atra; sporidia 3-septata, loculis 2 extimis subconoideis minoribus.

Hab. Ad folia viva *Myrtaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sub. n. 1699).

Obs. Mycelium irregulariter expansum plagulas tenuissimas arachnoideo-pelliculosas matrici arctiuscule adnatas atras saepe confluentes ac totum folium occupantes efficiens, ex hyphis densiuscule intricatis alterni-ramulosis atris opacis, hyphopodiis paucis alternis globosis (10–12 μ dm.) grosse 1-guttulatis laevibus, 1-cellulari-pedicellatis donatis, hinc inde setulis erectis rigidulis opacis (200–300 × 5–6 μ) apice acutis integrisque inspersis efformatum; perithecia in vivo globosa (200–220 μ dm.) in sicco collabescentia astoma atra glabra papillosa, membranacea coriacella, contextu e cellulis majusculis (7–10 μ dm.) atro-fuligineis composito donata; asci elliptici v. pyriformes (50–60 × 30–40 μ), breviter crasseque pedicellati, 2–4-spori, mox diffluentes; sporidia elliptica saepius curvula 3-septata ad septa constrictula (40–44 × 15–16 μ) loculis duo extimis hemisphaerico-conoideis pro ratione parvulis, opace fuligineae. Species *M. gangliferae* B. et C. et *M. guaraniticae* Speg. peraffinis, ab utraque hyphopodiis globu-

losis laevibus atque loculis apicalibus sporidiorum conoideis recedens.

228. Meliola Puiggarii Speg. (n. sp.)

Diag. Subiculum tenuissimum maculare, setulis destitutum, hypopodiis globoso-angulosis pedicellatis ornatum; perithecia globosa atra papillosa, setulis subhyalinis crassis brevibusque larvaeformibus inspersa; sporidia triseptata fuliginea.

Hab. Ad folia viva *Rubi* speciei cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2722).

Obs. Mycelium epiphyllum saepius maculas orbiculares (2–5''' dm.) laxe gregarias atras parum perspicuas efficiens, ex hyphis dense intricatis opposite v. alterne ramosis fuligineis (6–7 μ crs.) septulatis, hyphopodiis globoso-angulosis grosse 1-guttulatis (12-14 × 14 μ) cellula unica longiuscula (14–16 × 5-7 μ) pedicellatis alternis ornatis, setulis destitutis compositum; perithecia centro macularum saepius 3–8-constipata, in vivo globosa (150-180 μ) in sicco collabescentia atra papilloso-verrucosa, pilis 4-10 cylindraceis divaricatis brevibus crassis (100–130 × 20–25 μ) dense minuteque transverse rugosis apice abrupte inaequilateraliter angulato-acutatis subuncinato-incurvis larvam vermiformem simulantibus sordide hyalinis inspersa, membranaceo-coriacella, contextu subopaco e cellulis polygonis majusculis (15–20 μ dm.) composito donata; asci elliptici, 2–3-spori mox diffluentes; sporidia elliptico-cylindracea (40–50 × 14–16 μ) ad septa constrictula, loculis subaequalibus v. extimis vix minoribus, utrinque obtuse rotundata, subopace fuliginea. Species praedistincta, *M. sanguineae* Pk. affinis!

229. Meliola brasiliensis Speg. — Sacc., Syll. pyr. vol. I, f. 66.

Hab. Ad folia subcoriacea *Bignoniaceae?* cujusdam in dumetis prope *Apiahy*, Aest. 1881 (sub n. 1551).

230. Meliola sororcula Speg. (n. sp.)

Diag. Purpureo-maculans, epiphylla; subiculum parcissimum radians atrum setulis destitutum, hyphopodiis pedicellatis subglobosis laevibusque ornatum; perithecia globosa atra verruculosa setulis subhyalinis crassis brevibusque larvaeformibus inspersa; sporidia 4-septata fuliginea.

Hab. Ad folia viva *Baccharidis pingreae* in dumetis prope *Apiahy*, Maj. 1888 (sub. n. 2774).

Obs. Maculae epiphyllae sparsae obscure purpurascentes indeterminatae irregulariter orbiculares (2–5''' dm.) ad hypophyllum non v. vix manifestae; subiculum epiphyllum in centro macularum insidens parum evolutum arachnoideo-radians, ex hyphis atro-fuligineis densiuscule intertextis alterne ramosis, setulis destitutis, hyphopodiis e globoso angulosis (12–14 × 14 μ) grosse 1-guttulatis 1-cellulari-pedicellatis (5–10 × 5–6 μ) alternis ornatis compositum; perithecia in centro subiculi pauci-aggregata, in vivo globulosa (150–180 μ dm.) in sicco collabescentia atra verruculosa, pilis paucis subcylindraceis divaricatulis brevibus crassisque (80–100 × 18–20 μ), dense minutissimeque transverse rugosis, apice abrupte obtuseque acutatis subuncinatisque, sordide e hyalino fumosis (larvaeformibus) inspersa, membranaceo-coriacella, contextu opaco grosse parenchymatico fuligineo-atro; asci elliptici 2-spori mox diffluentes; sporidia cylindracea (45–60 × 18 μ) recta v. vix subcurvula 4-septata, ad septa constricta, loculis omnibus subaequalibus, fuliginea. Species pilorum perithecialium forma priori affinis, *M. sanguineae* Pk. etiam cognata, ab utraque sporidiis 4-septatis mox dignoscenda.

231. Meliola armata Speg. (n. sp.)

Diag. Subiculum maculare glabrum, hyphopodiis clavulatis alternis; perithecia globosa atra glabra basi setulis apice

integris armata; sporidia ellipsoidea 4-septata fuliginea.

Hab. Ad folia coriacea viva *Myrsines*? speciei cujusdam in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2381-82).

Obs. Subiculum epiphyllum plagulas suborbiculares (3–5''' dm.) atras subdeterminatas subcrustaceas rimulosas, a matrice frustulatim secedentes efficiens, ex hyphis dense intricatis saepius opposito-ramosis fuligineis (6-10 μ crs.) subopacis, hyphopodiis densiusculis alternis obovatis v. subclavulatis rectis laevibus obtusis 1-cellulari-pedicellatis (30-35 × 10-14 μ cap. — 20-25 × 8–9 μ ped.) ornatis, setulis destitutis compositum; perithecia in plagulis laxe gregaria, in vivo globoso-depressa (100-180 μ dm.), in sicco saepius cupulato-collapsa atra verruculosa glabra membranaceo-coriacella, contextu atro fere indistincto donata, basi setulis submycelialibus erectis rigidulis (100–200 × 8–10 μ) atris opacis apice integris acutisque cincta; asci elliptici apice crasse tunicati base brevissime crasseque pedicellati (60 × 32–45 μ), 2-4-spori; sporidia ellipsoidea utrinque obtuse rotundata (48-55 × 20–24 μ) 4–septata, lenissime constricta subopace fuliginea.

232. Meliola melastomacearum Speg. (n. sp.)

Diag. Subiculum vix evolutum hyphopodiis obovatis laevibus ornatum, setulis destitutum; perithecia globosa hyphis paucis base ornata; sporidia ellipsoidea 4-septata fuliginea.

Hab. Ad folia viva *Melastomacearum* in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2485).

Obs. Subiculum parcissimum plagulas minutissimas (0,5-1''' dm.) sparsas difformes subcrustaceas efficiens, ex hyphis laxe alterne ramulosis flexuosulis (8 μ crs.) opace fuligineis, hyphopodiis alternis densiusculis ellipticis v. obovatis laevibus obtusis brevissime pedicellatis (20 × 14 μ) ornatis, setulis destitutis compositum; perithecia globu-

losa (140–160 μ dm.) verruculosa atra subcarbonacea fragillima base hyphis paucis divaricatis continuis apice integris obtusisque (50–100 × 10 μ) atro-fuligineis adspersa; asci non visi; sporidia cylindraceo-elliptica (36–37 × 14-16 μ) utrinque obtuse rotundata, 4-septata, ad septa leniter constricta fuliginea.

233. Meliola calva Speg. (n. sp.)

Diag. Subiculum effusum tenuissimum hyphis, hyphopodiis alternis obovato-angulatis donatis, setulis destitutis compositum; perithecia minuta glabra; sporidia cylindracea utrinque rotundata 4-septata fuliginea.

Hab. Ad folia viva subcoriacea *Laurinearum* in sylvis prope *Apiahy*, Aest. 1881 (sub n. 1483–1507).

Obs. Subiculum subcrustaceo-effusum tenuissimum arcte matrice adnatum maculas orbiculares (3–5''' dm.) efficiens, epi-v. rarius hypo-phyllum glabrum, ex hyphis (6-12 μ crs.), obscure fuligineis radiantibus flexuosis alterne ramosis densiuscule intertextis, hyphopodiis obovatis (15–20 × 12-13 μ) non v. obsolete angulosis 1-cellulari-pedicellatis alternis ornatis compositum, setulis erectis destitutum; perithecia in vivo globosa (150-220 μ dm.) in sicco depressula astoma atra glabra papillulosa subcarbonacea, contextu opaco imperspicuo atro donata; asci ellipsoidei (50–70 × 30–35 μ), 2-(rarius 3-) spori mox diffluentes; sporidia cylindracea utrinque rotundata (50-55 × 18–20 μ) 4-septata, ad septa constrictula, loculo centrali vix longiore subcrassioreque subopace fuliginea. Species jam sub *M. penicillata* Lév. (Fung. arg. pug. IV n. 117) imprudenter edita, ob hyphas a *Podosporio penicillio* Speg. parasitice infecta. *M. penicillata* Lév., specimibus typicis inspectis, non est *Meliola!*

234. Meliola spinigera Speg. — Sacc., l. c. f. 66.

Hab. Ad folia coriacea plantae ignotae in dumetis prope *Apiahy*, Hiem. 1881 (sine n.).

Obs. Specimina senescentia subobsoleta, distinctissima tamen; an huc *M. pachytricha* Lév.?

235. Meliola crustacea Speg. (n. sp.)

Diag. Subiculum crustaceum maculare glabrum, hyphopodiis crebris suboppositis magnis ellipticis v. obovatis laevibus ornatum; perithecia globosa atra glabra; sporidia ellipsoidea 4-septata fuliginea.

Hab. Ad folia viva *Drymidis* speciei cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sine n.).

Obs. Subiculum plagulas epiphyllas orbiculares v. irregulares (2-4''' dm.) determinatas atras crustaceas matrici arcte adnatas glabras efficiens, ex hyphis dense intertextis opposito-ramosis crassis (12-14 μ) fuligineis septatis, setulis destitutis, hyphopodiis obovatis v. ellipticis 1-cellulari-pedicellatis (30-35 × 15-20 μ) laevibus suboppositis v. alternis densissime ornatis compositum; perithecia in plagulis constipata v. subcircinata, in vivo globosa (200 μ dm.) in sicco depressula glabra verruculosa coriacea, contextu parenchymatico fere indistincto atro-fuligineo donata; asci ovati (70-80 × 45-50 μ) aparaphysati, 2-spori, mox fluxiles; sporidia ellipsoidea (60-62 × 30-34 μ) utrinque rotundata, 4-septata ad septa constrictula recta, loculis omnibus subaequilongis 1-guttulatis, fuliginea. An huc *M. corallina* Mntgn., sed sporidia non 3-septata?

236. Meliola subcrustacea Speg. (n. sp.)

Diag. Subiculum subcrustaceum maculare glabrum, hyphopodiis paucis alternis subramululiformibus parum manifestis donatum; perithecia globosa atra glabra; sporidia e fronte ellipsoidea e latere subcylindracea 4-septata fuliginea.

Hab. Ad folia viva plantae ignotae cujusdam in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2703).

Obs. Subiculum plagulas epiphyllas suborbiculares (1-3''' dm.) sparsas determinatas atras crustaceas matrici arcte adnatas glabras efficiens, ex hyphis dense intertextis alterne ramosis crassis (14–15 μ crs.) opace fuligineis setulis destitutis, hyphopodiis obovatis sessilibus (30 × 15 μ) subramuluiiformibus alternis paucissimis sparsis ornatis compositum; perithecia globosa (250–300 μ dm.) glabra verruculosa coriaceo-carbonacea, contextu opaco indistincto; asci elliptici (80–100 × 45–50 μ) subpersistentes apice acutiusculi crassiusculeque tunicati base crasse brevissimeque pedicellati, pseudoparaphysati (an semper?) 2-spori; sporidia e fronte elliptica e latere inaequilateraliter subcylindracea (65–70 μ lg. × 30 μ dm. ant. × 20-30 μ dm. lt.), utrinque obtuse rotundata, 4-septata, ad septa lenissime constrictula (loculo medio caeteris nonnihil majore) fuliginea.

237. Meliola arachnoidea Speg. (n. sp.)

Diag. Subiculum arachnoideo-maculare glabrum, hyphopodiis subsessilibus alternis e globoso ovatis ornatum; perithecia globosa atra glabra; sporidia e fronte elliptico-cylindracea e latere cylindraceo-compressa, 4-septata, fuliginea.

Hab. Ad folia viva *Bignoniaceae* speciei cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sub n. 1551).

Obs. Subiculum plagulas irregulares suborbiculares (1-5''' dm.) saepe confluentes totum epiphyllum obtegentes tenuissime arachnoideo-fibrillosas atras glabras parum perspicuas arcte matrici adnatas efficiens, ex hyphis laxe expansis alterne v. opposite ramosis gracilibus (5-6 μ crs.) septulatis olivaceis, setulis destitutis, hyphopodiis ex obovato subglobosis laevibus brevissime 1-cellulari-pedicellatis (15–16 × 7-8 μ) alternis subdensiusculis ornatis composi

tum; perithecia in plagulis sparsa in vivo globosa (150-200 μ dm.) in sicco depressa glabra subverruculosa atra membranacea, contextu grosse celluloso (cellulis 10 μ dm.) parenchymatico olivaceo-fuligineo donata; asci elliptici (60 × 21 μ) subpersistentes aparaphysati 2-spori; sporidia e fronte cylindraceo-ellipsoidea e latere cylindraceo-compressa (38-40 μ lg. × 15-16 μ dm. ant. × 12 μ dm. lt.), utrinque obtuse rotundata, 4-septata, non v. parce constrictula fuliginea. Species *M. brasiliensi* Speg. valde affinis sed tamen ut videtur satis distincta.

238. Meliola plebeja Speg. (n. sp.)

Diag. Subiculum pruinuloso-maculare glabrum, hyphopodiis alternis quandoque ampulluliformibus quandoque globoso-ovatis angulosis pedicellatis ornatum; perithecia globosa verrucosa atra glabra; sporidia cylindracea, recta v. subcurvula 4-septata fuliginea.

Hab. Ad folia viva *Solanaceae?* cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2759).

Obs. Subiculum plagulas hypophyllas irregulares majusculas (2-10''' dm.) pruinuloso-fibrillosas atras subindeterminatas arcte matrici adnatas efficiens, ex hyphis tortuosis dense intertextis irregulariter ramosis (10 μ crs.) opace fuligineis, setulis destitutis, hyphopodiis alternis quandoque (rarius) ampulluliformibus sessilibus, quandoque anguloso-v. sublobato-globosis, 1-cellulari-pedicellatis (20 × 15 μ), 1-guttulatis densiuscule ornatis compositum; perithecia in plagulis hinc inde constipata v. sparsa in vivo subglobosa (150-180 μ dm.), in sicco rugulosa v. subcupulato-depressa, glabra verruculosa membranacea, contextu grosse parenchymatico-celluloso olivaceo donata; asci elliptici, mox diffluentes, 2-6-spori aparaphysati; sporidia cylindracea (42-46 × 14-16 μ), utrinque obtuse rotundata, loculis omnibus aequalibus, e fronte recta e latere inaequilaterali-subcurvula, 4-sep-

tata, ad septa leniter constricta, subopace fuliginea.

239. Meliola plebeja Speg.

Var. *asperrima* Speg.

Diag. Subiculum pruinuloso-maculare glabrum hyphopodiis alternis e globoso trigonis v. subtrilobis ornatum; perithecia globosa, grosse pyramidato-verrucosa atra glabra; sporidia cylindracea 4-septata, fuliginea.

Hab. Ad folia viva *Solanaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sub n. 1551).

Obs. Subiculum plagulas saepius hypo-(rarius epi-) phyllas irregulares parvulas (1–5''' dm.) plus minusve confluentes efficiens ex hyphis flexuosulis (6–8 μ crs.) dense intertextis alterne ramosis fuligineis septulatis, setulis destitutis, hyphopodiis laxis alternis ex obovato v. globoso trigonis v. subtrilobis (20×15 μ), 1-guttulatis, compositum; perithecia in plagulis laxe gregaria v. sparsa globosa (200 μ dm.) in parte supera grosse pyramidato-verrucosa coriacella, atra glabra, contextu indistincto atro opaco; asci non visi; sporidia elliptico-cylindracea (42–43 × 17–18 μ), utrinque obtusa, 4-septata, ad septa parum constricta, loculis omnibus subaequalibus, fuliginea. An huc *M. triloba* Wint.?

240. Meliola decidua Speg. (n. sp.)

Diag. Subiculum plagulas membranaceas dense velutino-hirsutas orbiculares maculis bullosis insidentes facillime a matrice secedentes efficiens, aterrimum, hyphopodiis densis suboppositis obovatis, setulis apice integris instructum; perithecia in villo subiculi abscondita globosa glabra atra; sporidia cylindracea 4-septata fuliginea.

Hab. Ad folia viva *Convolvulaceae*? cujusdam in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2344).

Obs. Maculae amphigenae fuscescentes orbiculares (3–6''' dm.) bullosae indeterminatae; subiculum pulvinulos orbiculares (2–5''' dm.) epiphyllos maculis insidentes ac fa-

cillime a matrice integros secedentes, inferne membranaceos laeves, superne dense velutino-hispidulos aterrimos efficiens, ex hyphis crassiusculis (10-14 μ crs.) rectiusculis fuligineis opacis dense intertextis ac ramulosis, setulis rigidulis erectis (300–500 × 10 μ) apice integris attenuato-acutatis opacis densissime armatis, hyphopodiis elliptico- v. obovato-subglobosis laevibus v. vix angulosis (20–25 × 15 μ) brevissime 1-cellulari-pedicellatis, grosse 1-guttulatis subopace fuligineis alternis v. suboppositis dense ornatis compositum; perithecia inter setulas nidulantia atque abscondita globosa (180–200 μ dm.) atra vix verruculosa glabra coriacella, contextu indistincto atro-opaco; asci non visi; sporidia cylindracea (50-52 × 15-16 μ) 4-septata, ad septa subconstrictula, loculis extimis caeteris non v. vix longioribus rotundatis v. subacutato-rotundatis donata, subopace fuliginea.

241. Meliola? clavatispora Speg. (n. sp.)

Diag. Subiculum maculare pilosum, pilis apice integris, hyphopodiis alternis subglobosis sessilibus ornatum; perithecia globosa pilosa atra; asci cylindracei subclavati octospori persistentes aparaphysati; sporidia clavulata 4-septata utrinque obtusa opace fuliginea.

Hab. Ad folia viva *Apocineae* speciei cujusdam in sylvis prope *Apiahy*, Apr. 1881 (sub n. 1701).

Obs. Subiculum plagulas epiphyllas sparsas irregulariter orbiculares (1–3‴ dm.) olivaceo-atras, laxe pilosulas parum perspicuas efficiens, ex hyphis flexuosulis (10 μ crs.) dense irregulariterque ramuloso-intertextis, pilis erectis (120-180 × 6-8 μ) flaccidis flexuosis septulatis atris opacis apice integris pallidioribus pellucidis acutis v. obtusis integris densiuscule adspersis, hyphopodiis sessilibus irregulariter subglobosis (10 × 10 μ) laevibus integris opacis alternis ornatis; perithecia in plagulis solitaria v. pauci-gregaria subglobosa (200-250 μ dm.) atra, pilis patulis

(50-80 × 7 μ) atro-opacis laxe subvestita; asci cylindracei v. cylindraceo-subclavulati (100 × 20-30 μ) apice rotundati base subcuneato-pedicellati, 8-spori, aparaphysati; sporidia recte v. suboblique disticha clavulata (40-45 × 12 μ), primo 4-blasta fumosa, dein 4-septata, ad septa constrictula, loculo cuarto supero caeteris subcrassiore, utrinque obtusa, subopace fuliginea. Species omnium partium fabrica a genere *Meliola* nonnihil recedens.

SPHAERIACEAE Fr.

242. Eutypa ludibunda Sacc., l. c. f. 167.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1555-1573-2596).

Obs. Formae brasilienses stromatibus parvulis ellipticis v. elongato-confluentibus saepe inter crustas licheninas erumpentibus, *Graphidem* quamdam majusculam simulantibus; ostiola 3-4-sulcata non v. vix exertula; asci clavulati apice truncati basi longe pedicellati (p. sp. 30-50 × 5-7 μ) aparaphysati octospori; sporidia allantoidea plus minusve curvula (8-12 × 2,5-3 μ) utrinque 1-guttulata, chlorinula.

243. Eutypa lophiostomoides Speg. (n. sp.)

Diag. Stroma late ambiens; acervuli pustulato-elevati ostiolis saepius lophiostomoideis brevissime fasciculato-erumpentibus coronati; asci clavulati apice acutati postice longe pedicellati paraphysati octospori; sporidia allantoidea parum curvula chlorina.

Hab. Ad corticem ramorum putrescentium in sylvis prope *Apiahy*, Hiem. 1881 (sub n. 1681).

Obs. Stroma effusum aequale sub peridermio summoque corticis strato supero evolutum, eisque fere immutatis arctiuscule adnatum semper tectum; acervuli conferte gre-

garii densiusculeque atque modice pustulato-elevati (1-2''' dm.) disco, ex ostiolis fasciculato-erumpentibus minute hysterioideis efformato, parum elevato coronati; perithecia in acervulis 2-7-gregaria globulosa (120–150 μ dm.) atra glabra membranaceo-coriacella, contextu indistincto donata; asci clavulati apice attenuato-acutati postice longissime pedicellati (p. sp. 35 × 6 μ), octospori paraphysibus praelongis densissimis filiformibusque obvallati; sporidia allantoidea (8-10 × 2-2,5 μ) parum curvula utrinque plus minusve rotundata atque saepius 1-guttulata chlorina. Species pulchella habitu *Cryptosphaeriae populinae* (Pers.) Sacc., simillima, omniumque tamen partium fabrica priori peraffinis; an tantum ejusdem varietas?

244. Eutypa fraxini (Nitz.) Sacc. — l. c. f. 174.

Hab. Ad ramos dejectos putrescentes in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2684).

Obs. Forma brasiliensis magis effusa atque acervulis parvulis densis pustulaeformibus donata, matrice cinerascenti-infuscata insidens; asci clavulati (70 μ lg. tot. — p. sp. 30–35 × 5–6 μ) octospori paraphysibus filiformibus tenuibus guttulatis paucis immixti; sporidia allantoidea (9–10 × 2–2,5 μ) recta v. curvula utrinque obtusa ac eguttulata chlorina. An species distincta?

245. Cryptovalsa platensis Speg. — Sacc., l. c. f. 189.

Hab. Ad ramulos dejectos putrescentes in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2347).

Obs. Specimina brasiliensia a typo acervulis majoribus e cortice erumpentibus subvalsoideis recedentia; asci clavati (p. sp. 80 × 10 μ) longe pedicellati aparaphysati; sporidia allantoidea (6-8 × 1,5 μ) leniter curvula eguttulata chlorina.

246. Diatrype Puiggarii Speg. (n. sp.)

Diag. Superficialis hemisphaerica minuta ostiolis exasperata extus atra intus virescentia; perithecia pauca globosa; asci clavati longissime stipitati octospori; sporidia botuliformia modice curvula chlorinula.

Hab. Ad ramulos dejectos putrescentes in dumetis uliginosis prope *Apiahy*, Maj. 1888 (sub n. 2357).

Obs. Stromata superficialia facillime a matrice immutata secedentia e globoso depressa v. e lenticulari hemisphaerica (1–1,5‴ lt. × 0,5–0,8‴ crs.), sparsa v. hinc inde laxe aggregata ruguloso-asperula, extus atra glabra, intus ex albo pallide sordideque virescentia; perithecia monosticha globulosa (200–220 μ dm.) in quoque stromate 3–12-aggregata, membranacea, contextu parum distincto, olivacea, in ostiolo subcarbonaceo atro stromatis superficem attingente parceque subexertulo producta; asci clavulati (p.-sp. 15–25 × 2,5–4,5 μ) apice rotundati deorsum longissime stipitati octospori aparaphysati; sporidia conglobata v. subdisticha allantoidea (6 × 1 μ) modice curvula utrinque rotundata ac 1-guttulata chlorinula. Species *D. laurinae* Rhm satis accedens.

247. Diatrypella verruciformis (Ehr.) Nitz. — Sacc., l. c. f. 200.

Hab. Ad corticem ramorum putrescentium in hortis prope *Apiahy*, Iliem. 1881 (sine n.).

Obs. Asci clavati apice rotundati deorsum longe attenuato-pedicellati (120 μ lg. tot. — p. sp. 60 × 12–14 μ) polyspori aparaphysati; sporidia conglobata leniter curvula (4-6 × 1,5 μ) utrinque obtusula ac 1-guttulata chlorinula.

248. Diatrypeopsis laccata Speg. — Fung. guar. pug. I, n. 186.

Hab. Ad corticem ramorum putrescentium in sylvis prope *Apiahy*, Apr. 1881 (sub n. 1615).

Obs. Stromata cortice duriore innato-impressa orbicularia (10–15‴ diam.) determinata aterrima nitentia laevia v. vix

undulata ac sub lente valida punctulato-asperula ; asci sporidiaque desiderata.

249. Anthostomella nobilis Sacc. et Speg. — Sacc., l. c. f. 292.

Hab. Ad folia dejecta putrescentia *Nectandrae* speciei cujusdam in sylvis prope *Apiahy*, Jul. 1881 (sub n. 1636).

Obs. Specimina brasiliensia vix a typo recedunt ; perithecia sparsa amphigena parenchymate innata, epidermide vix nigrificato adnato-tecta, minuta (150–200 μ dm.) coriacella, contextu indistincto ; asci cylindracei apice obtuse rotundati base breviter crassiusculeque stipitati (70–80 × 7-8 μ) octospori aparaphysati ; sporidia recte v. oblique monosticha, elliptica v. vix subnavicularia utrinque obtuse acutata (12–14 × 5-6 μ) non v. 1-2-guttulata fuliginea.

250. Anthostomella Puiggarii Speg. — Sacc., l. c. f. 280.

Hab. Ad culmos dejectos putrescentes *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, per ann. 1881-88 (sub n. 1032–2386).

Obs. Specimina culmicola a foliicolis typicis in l. c. descriptis nonnihil deflectentia. Macula nulla v. ellipsoideo-elongata (5–15''' lg. × 2-5''' lt.) fuscescens, linea nulla cincta ; perithecia in centro macularum laxe aggregata v. sparsa immersa v. parce prominula (200–250 μ) coriacella, contextu indistincto ostiolo carbonaceo epidermidem vix circum circa nigrificatam perforante donata ; asci cylindracei antice obtusissime rotundati postice modice attenuato-pedicellati e latere compressi (65-70 × 3–5 × 2 μ) non v. parcissime paraphysati octospori ; sporidia recte monosticha e fronte elliptica plus minusve inaequilateralia (5-8 × 3–4 μ) e latere valide compressa (1,5 μ crs.) utrinque obtusiuscula fuliginea, muco destituta.

251. Hypoxylon ? cyclopicum Speg. (n. sp.)

Diag. Perithecia maxima atra mammaeformia grosse transverse rugosa ostiolo conico majusculo acuto coronata dense constipata stromate parcissimo concolore juncta; asci cylindracei octospori mox diffluentes; sporidia elongata inaequilateralia utrinque obtusa fuliginea.

Hab. In trunco decorticato putrescente in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2374).

Obs. Stroma nullum v. vix manifestum; perithecia superficialia inferne densissime constipata subglobosa maxima (2-3‴ dm.) e mutua pressione saepius angulosa atra opaca glabra, superne libera transverse plus minusve perspicue ac dense rugoso-undulata apice ostiolo conoideo majusculo laevissimo acuto ornata; asci densissime subfasciculati (15-16 μ crs.) cito diffluentes octospori; sporidia oblique monosticha cylindraceo-ellipsoidea plus minusve inaequilateralia utrinque obtusiuscula (35-40 × 10-12 μ) eguttulata subopace fuliginea. Species nobilissima ad *Roselliniam*, sectionis *Fassiellae*, characteribus perplurimis vergens!

252. Hypoxylon? goliath Speg. (n. sp.)

Diag. Perithecia maxima atra globosa dense majusculeque papilloso-verrucosa ostiolo minuto zona laevi subcincto coronata, stromate concolore parcissimo juncta; asci cylindracei octospori mox diffluentes; sporidia gigantea fusiformia utrinque longissime setiformi-attenuata fuliginea.

Hab. Ad corticem caudicis putrescentis in sylvis prope *Apiahy*, Jul. 1888 (sub. n. 2380).

Obs. Stroma parcissimum atrum vix manifestum; perithecia superficialia densissime constipata globosa maxima (2-2,5‴ dm.) atra opaca glabra verruculis majusculis obtusis dense vestita, superne zona laevi plus minusve perspicua centro ostiolo vix papillulato minuto perforata; asci densissimi subfasciculati (18-20 μ crs.) cito diffluentes

octospori ; sporidia oblique monosticha fusiformia v. elongato-navicularia (100 × 12-14 μ) utrinque in appendice setuliformi (15-25 × 1-2 μ) recta v. subflexuosa attenuato-producta, eguttulata opace fuliginea. Species etiam praedistincta omnium partium fabrica ad *Roselliniam*, sectionis *Fassiellae*, vergens.

253. Hypoxylon apiahynum Speg. (n. sp.)

Diag. Subcrustaceo-effusum atrum, stromate parco, peritheciis globosis exertis dense constipatis, ostiolis minutis areolato-applanatis efformatum ; sporidia minuta navicularia fuliginea.

Hab. Ad corticem ramorum putrescentium in sylvis prope *Apiahy*, Jun. 1881 (sub n. 1655).

Obs. Perithecia dense constipata atra globosa (400-500 μ dm.) stromate concolore parco juncta, pulvinulos irregulares (1-2''' dm.) superficiales saepe confluentes parum prominulos ambitu non effusos efficientia, superne plus minusve exerta atque ostiolo minute papillulato, areola discoidali impressa plana concolore, vix sub lente perspicua, ruga gracillima limitata cincto coronata, carbonacea opaca sublaevia ; asci octospori mox diffluentes ; sporidia oblique v. recte monosticha elliptico-navicularia (8-9 × 4 μ) utrinque obtusiuscula opace fuliginea.

254. Hypoxylon chionostomum Speg. (n. sp.)

Diag. Irregulariter glomerulosum, stromate plus minusve evoluto, peritheciis globosis plus minusve exertis, ostiolis obtuse papillatis subtruncatis disco albo donatis ; sporidia elliptica fuliginea.

Hab. Ad corticem dejectum putrescentem in sylvis prope *Apiahy*, Jun. 1888 (sub n. 2858).

Obs. Perithecia quandoque solitaria quandoque 5-30-glomerulata recta v. obliqua stromate plus minusve evoluto juncta, exerta v. plus minusve immersa globosa (900-

1200 μ dm.) atra carbonacea opaca laevia, ostiolo umbonato obtuso apice truncato atque areola sordide alba plus minusve determinata (200-250 μ dm.) donato coronata; asci cylindracei apice obtuse rotundati base breviter attenuato-pedicellati (p. sp. 180 × 20 μ) octospori paraphysibus filiformibus longioribus immixti; sporidia oblique monosticha late elliptica (26-28 × 14-16 μ) utrinque obtusissima non v. vix subinaequilateralia opace fuliginea. An huc *H. leucostomum* Ck.?

255. Hypoxylon leptascum Speg. (n. sp.)

Diag. Crustaceo-effusum tenue atrum, peritheciis stromate immersis globosis vix colliculoso-prominulis papillulato-ostiolatis; asci longiusculi gracillimi paraphysati octospori; sporidia elliptico-elongata inaequilateralia fuliginea.

Hab. Ad corticem putrescentem in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2769).

Obs. Perithecia globosa (500-600 μ dm.) densissime constipata atra opaca glabra stromate fere tota immersa vix superne subhemisphaerico-prominula, plagulas atras granulosas (10-15''' dm.) subtenues crustaceas irregulariter expansas ambitu repandas atque abruptiuscule rotundato-subtruncatas efficientia, ostiolo parvulo conoideo-papillulato obtusiusculo coronata; asci cylindracei apice subtruncato-rotundati base longiuscule attenuato-pedicellati (p. sp. 60-70 × 5 μ) e sterigmatibus longiusculis ramulosis ruguloso-crassiusculis (25-30 × 3-4 μ) exsurgentes octospori parcissime paraphysati; sporidia elliptico-elongata v. elongato-navicularia (10 × 4 μ) utrinque acutiuscule rotundata, non v. minute 2-guttulata, pallide fuligineo-fumosa.

256. Hypoxylon umbilicatum Speg. (n. sp.)

Diag. Irregulariter glomerulosum sordide ochraceum, stro-

mate parcissimo, peritheciis globulosis ostiolo crasse umbonato profundeque umbilicato coronatis; asci cylindracei octospori aparaphysati; sporidia late elliptica fuliginea.

Hab. Ad palos dejectos putrescentes in hortis, *Apiahy*, Maj. 1888 (sub n. 2858).

Obs. Perithecia 12-100-gregaria glomerulos superficiales pulvinulatos irregulares sparsos v. confluentes efficientia, dense constipata globulosa (600-700 μ dm.) inferne stromate parco juncta, superne libera globulosa carbonacea atra, pruinula crassa sordide ochracea v. ferruginea incrustata, apice ostiolo majuscule umbonato centroque umbilicato concolore donata; asci cylindracei apice obtusissime rotundati postice longiuscule attenuato-pedicellati (p. sp. 300-350 × 24-25 μ = ped. 50-100 × 10-15 μ), 6-8-spori aparaphysati; sporidia recte monosticha late elliptica (38-40 × 20-22 μ) non v. leniter inaequitateralia eguttulata opace fuliginea.

257. Hypoxylon Puiggarii Speg. (n. sp.)

Diag. Fusco-atrum late crustaceo-effusum stromate eximie evoluto, peritheciis vix prominulis globulosis ostiolo minutissimo papillulato areola impressa cincto donatis; asci cylindracei octospori aparaphysati; sporidia elliptico-navicularia fuliginea.

Hab. Ad corticem putrescentem ramorum in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2341).

Obs. Perithecia densissime constipata carbonacea atra globulosa (500-600 μ dm.) stromate immersa vix superne granuloso-prominula, plagulas crustaceas subtenues late effusas (10-80''' dm.) ambitu repandas abrupte obtuseque rotundatas efficientia, primo sordide subpruinuloso-fusca dein glabrata atra opaca, ostiolo minutissimo papillaeformi, areola discoidali (90-120 μ dm.), vix sub lente perspicua, impressa, rugula tenuissima vix elevata margi-

nata concolore, trita subcyanescente, cincto ornata; asci cylindracei apice obtuse rotundati base modice attenuato-pedicellati (p. sp. 50-60 × 4-5 μ — ped. 20-25 × 2-3 μ) octospori aparaphysati; sporidia recte v. vix oblique monosticha elliptica v. navicularia, utrinque plus minusve acutiuscule rotundata (6-7 × 3 μ) opace fuliginea.

258. Camillea turbinata (Brk.) Speg. — Sacc., l. c. f. 372 (sub *Hypoxylo*).

Hab. Vulgata ad ramos truncosque emortuos in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1451-1501-2345).

Obs. Specimina saepius sterilia etsi sine dubio ullo ascigera, stromatibus quandoque parvulis sparsis, quandoque majoribus dense constipatis primo sordide obscureque fusco-ferrugineis laevibus, dein atris subnitentibus minutissime reticulato-rugulosis.

259. Camillea bilabiata Speg. (n. sp.)

Diag. Superficialis atra parvula subconoidea, apice profunde excavata, foveola margine obtusa naviculari-bilabiata; perithecia cylindracea stromate omnino immersa; asci et sporidia non visa.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2846).

Obs. Stromata sparsa v. laxe subgregaria, e conoideo hemisphaerica, e latere saepius leniter compresso-elongatula parvula (4-5‴ dm. × 2,5-3‴ alt.) superne foveola hemisphaerico-elongata (1,5‴ dm.) profunda margine obtuso naviculari utrinque minute subacutato-labiato cincta donata, atra opaca v. vix in labiis nitentia glabra laevia v. sub lente non v. lenissime obsolete subconcentriceque rugulosa crasse carbonacea durissima, intus concoloria peritheciis farcta; perithecia ellipsoideo-cylindracea dense constipata (1,5-2‴ alt. × 300-400 μ dm.) e mutua pressione saepius angulosa, tenuia, rigidula atra opaca, apice

ostiolo minutissimo instromatis foveola confluente coronata; asci et sporidia deficientia. Species praedistincta mox dignoscenda, sed difficillime exacte describenda!

260. Penzigia obovata (Brk.) Speg. — Sacc., l. c. f. 317 (sub *Xylaria*).

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Jun. 1888 (sub n. 1489-2915).

Obs. Stromata sparsa v. subcoespitosa, globosa ovata v. obovata (8-15''' dm.) saepe subundulata v. hinc inde obtuse submammillosa, extus coffeaecoloria v. fusco-testacea glaberrima, oculo nudo laevia, sub lente dense leniterque granuloso-papillosa sessilia v. base abrupte in pedicello gracili brevissimoque (1-3''' lg. × 1''' crs.) concolore glabro laevi producta, intus primo e base radiatim carnoso-fibrosa, dein araneosa, postremo cava ligneo-alba cortice tenuissimo fragili; perithecia densissime constipata globulosa majuscula (700-1000 μ dm.) extus non prominula, cortice stromatis adnata ac in ejusdem parte interna substantia subflocculosa ligneo-alba obovoluta; asci cylindracei apice obtuse rotundati, base longiuscule attenuato-pedicellati (p. sp. 200 × 10 μ — ped. 80-100 × 2.5 μ) octospori dense paraphysati; sporidia oblique monosticha cylindraceo-fusoidea (28-30 × 7-8 μ) inaequilateralia v. lenissime curvula opace fuliginea. Specimina typica *Xylariae obovatae* Brk. vix cortice externe obscuriore ac sub lente fere laevi, interne fibris v. medulla corticali deficientia recedunt.

261. Kretzmaria puiggarii (Speg.) Sacc. — Syll. pyr. vol. II, add. f. XXIX.

Hab. Ad caudices vetustos putrescentes in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 27-1445-2346).

Obs. Specimina hujus speciei cum nonnullis cubensibus, a Cl. Wrightio sub nomine *K. clavi* Fr. et *K. coenopi* (Mntgn.)

missis, comparata nullum discrimen inter illa reperire potui, etsi secundum diagnoses auctorum species mea a caeteris certe distincta! An species unica tantum nonnihil variabilis ac saepius imperfecte descripta? Sporidia fusoideo-navicularia (27-30 × 6-8 μ) non v. grosse 1-2-guttulata, opace fuliginea, per aetatem longitudinaliter rimosa.

262. Xylaria hypoxylon (L.) Grev. — Sacc., Syll. pyr. vol. I, f. 333.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2350-2354).

Obs. Forma conidiophora atque ascophora. Asci cylindracei antice rotundati postice attenuato-pedicellati (p. sp. 60-65 × 5-6 μ — ped. 25-30 × 2-3 μ) octospori aparaphysati; sporidia oblique v. subrecte monosticha navicularia (8-10 × 4-5 μ) fuliginea. Conidia pulverulenta elliptico-cylindracea (8-10 × 2-3 μ) utrinque obtusiuscula non v. leniter inaequilateralia hyalina.

263. Xylaria venosula Speg. (n. sp.)

Diag. Xylodactyla; minuta cylindracea crusta cinerascente reticulato-rimosa tecta, mucrone sterili donata, stipite sordide ochraceo-villoso suffulta; perithecia omnino immersa, ostiolo non v. vix exerto; asci cylindracei octospori aparaphysati; sporidia mediocria elliptico-navicularia fuliginea.

Hab. Ad caudices muscosos putrescentes in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1684-2360).

Obs. Coespitosa; clavulae cylindraceae teretes non v. undulatae utrinque abrupte coarctatae (5-10''' lg. × 2,5-3''' crs.) superne saepius in mucrone sterile acutoque (1-2''' lg.) productae, inferne stipite longiusculo tenui (5-15''' × 1''' crs.) sordide rufo-villosulo suffultae, extus crusta sordide fusco-cinerascente dense reticulato-rimulosa tectae, rimulis fusco-ferrugineis tenuibus vix impressis rugulosis

non v. parce papillulato-asperis, intus farctae albae sublignosae; perithecia densiuscule constipata globulosa (400–500 μ dm.) omnino immersa ostiolis vix papillulatis ac in rimis corticis stromatis saepe subseriatis coronata; asci cylindracei apice obtuse rotundati base modice attenuato-pedicellati (p. sp. 90–100 × 7–9 μ — ped. 35–40 × 2-3 μ) octospori aparaphysati; sporidia elliptica v. subcylindraceo-navicularia (14–18 × 6–7 μ) utrinque obtusiuscule acutata, primo 4–blasta hyalina, dein 2–guttulata fumosa, postremo eguttulata subopace fuliginea. Species pulcherrima *X. grammicae* Mntgn. peraffinis et facile ejusdem varietatem pusillam sistens.

264. Xylaria polymorpha (Pers.) Grev. — Sacc., l. c. f. 309.

Hab. Ad caudices muscosos putrescentes in sylvis prope *Apiahy*, Hiem. 1888.

Obs. Formae sequentes mihi adsunt:

a) Acrodactyla Nitz., nonnihil ad *Pistillarem* Nitz. vergens, extus tabacino-fusca rugulosa intus alba, sterilis (sub n. 2386).

b) Pistillaris Nitz. nonnihil compressa, extus atra ruguloso-subgranulosa intus alba lignosa; asci cylindracei pedicellati (200–210 μ × 10 μ lg. tot. — p. sp. 120 μ) paraphysati; sporidia elliptico-subfusiformia utrinque acutiuscula (20 × 6 μ) fuliginea (sub n. 2779).

265. Xylaria fragariaeformis Speg. (n. sp.)

Diag. Xyloglossa, atra fragariaeformis, inferne sterilis modice pedicellata, intus farcta alba lignosa; perithecia globosa vix prominula; asci cylindracei octospori paraphysati; sporidia submajuscula elliptico-navicularia fuliginea.

Hab. Ad caudices vetustos cariosos in sylvis prope *Apiahy*, Jun. 1888 (sine n.).

Obs. Clavulae saepius solitariae ovatae (12-13''' alt. × 10''' dm.) atrae, in parte supera conoideo-subhemisphaericae obtu-

siusculae dense peritheciigero-granulosae, in parte infera turbinatae laeves steriles, farctae, intus colore atque natura fere lignea, pedicello glabro ruguloso atro breviuculo (6–7''' × 2–3''') suffultae; perithecia in parte supera peritheciigera clavularum dense constipata monosticha globulosa v. ovata (500–600 μ dm.) e mutua pressione saepe angulosa e stromate leniter prominula atque extus minute denseque verruculosa, ostiolo vix perspicuo donata, coriacella nigro-farcta; asci cylindracei apice obtusissime rotundati postice modice attenuato-pedicellati (p. sp. 200–250 × 10-14 μ — pd. 50 × 5 μ) octospori paraphysibus filiformibus obvallati; sporidia suboblique monosticha elliptico-elongata (22-24 × 9-10 μ) utrinque acutiuscule rotundata plus minusve inaequilateralia non v. 1-2-guttulata opace fuliginea. Species pulcherrima *X. polymorphae* (Pers.) Grev. affinis, forma mox tamen dignoscenda.

266. Xylaria trivialis Speg. (n. sp.)

Diag. Xyloglossa; stromata irregulariter subcylindracea atra apice obtusa undique fertilia fragillima intus cava stipite plus minusve evoluto glabro suffulta; asci cylindracei paraphysati octospori; sporidia navicularia minuta fuliginea.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2779).

Obs. Simplex v. coespitosa; clavulae cylindraceae teretes compressae v. ruguloso-canaliculatae, saepe tortuosae v. hinc inde coarctatae, superne obtusissime rotundatae inferne plus minusve abrupte attenuatae (15–20''' lg. × 6–10''' crs.) pedicello brevi v. longiusculo terete ruguloso tortuoso glabro concolore (10''' lg. × 1''' crs.) suffultae, extus atrae v. perdilute caesiae v. subcoerulescentes (sub luce refracta), minute laxeque papillulosae carbonaceae fragillimae, intus cavae, parietibus tenuissimis peritheciis

vestitis donata; perithecia globulosa (500–600 μ dm.) densissime constipata atra in stromate non prominula ostiolo minutissimo non v. vix papillulato-exerto coronata, in parte interna stromatis albo-furfuracea; asci cylindracei mox diffluentes (5–6 μ crs.) octospori, paraphysibus filiformibus guttulatis obvallati; sporidia monosticha navicularia (10 × 4 μ) utrinque acutiuscule rotundata, saepius grosse 1-guttulata, obscure fuliginea. Species *X. polymorphae* (Pers.) Grev., sed stromate atro subcyanescente cavo deflectens; an huc *X. cubensis* Mntgn.?

267. Xylaria ippoglossa Speg. (n. sp.)

Diag. Xylocoryne; clavulae linguaeformes intus farctae albae extus atrae lenissime rugulosae, stipite conoideo-cylindraceo, strato pannoso fusco-atro vestito, impositae; perithecia globosa immersa; asci cylindracei longe pedicellati octospori paraphysati; sporidia elliptico-navicularia mediocria fuliginea.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2892).

Obs. Stromata solitaria v. laxe gregaria linguaeformia v. rarius spathulata apice obtusiuscule rotundata base abrupte coarctata (40-70‴ lg. × 10-12‴ lt. × 5–6‴ crs.) margine integra obtusa, vix rugulosa (in sicco) ostiolis minutissimis (vix sub lente perspicuis) dense exasperata, stipite lignoso intus albo, extus fusco-nigro, e terete conoideo (20-30‴ lg. × 5-10‴ crs.) strato pannoso (1–3‴ crs.) facile secedente sordide atro vestito suffulta; perithecia globulosa (400–600 μ dm.) immersa ostiolo corticem stromatis vix perforante ac subexertulo donata, dense constipata e mutua pressione angulosa; asci cylindracei (150-200 × 7–8 μ) densissimi, in parte sporifera (90–110 μ lg.) stipite nonnihil longiores; sporidia cylindraceo-fusoidea curvula (12-16 × 5-6 μ) utrinque obtusiuscula saepeque minute 1-guttulata subopace fuliginea.

268. Xylaria leprosa Speg. (n. sp.)

Diag. Xylocoryne ; clavulae sublinguaeformes intus farctae albae, extus pallide lateritio-fulvescentes densissime minuteque nigro-rimuloso-reticulatae, stipite tereti-conoideo strato pannoso crasso vestito suffultae; perithecia immersa globosa atra ; asci cylindracei longe pedicellati paraphysati, octospori; sporidia cylindraceo-navicularia submediocria fuliginea.

Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2892).

Obs. Stromata solitaria v. laxe gregaria saepius spathulata v. linguaeformia (20–30''' lg. × 10-15''' lt. × 3-5''' crs.), ubique fertilia cortice opaco pallide rufescenti–lateritio, dense minutissimeque rimuloso-reticulato, rimulis nigris minute granuloso-verruculosis (sub lente) ex ostiolis erumpentibus, recta, lignosa dura, intus farcta alba, stipite e conoideo subcylindraceo (15-20''' lg. × 5-7''' crs.) strato pannoso crasso sordide fusco-atro vestito donata ; perithecia immersa subglobosa (400-500 μ) densissime constipata, e mutua pressione saepe angulosa atra fusco-farcta, ostiolis corticem stromatis perforantibus ac per rimulas prominulis coronata; asci cylindracei (160-180 × 7–8 μ), in parte sporifera (120-130 μ lg.) pedicello conspicue longiores; sporidia cylindraceo-subfusoidea (17-20 × 5 μ) curvula utrinque obtusiuscula eguttulata subopace fuliginea.

269. Xylaria subtorulosa Speg. (n. sp.)

Diag. Xylocoryne?; stromata simplicia atra cylindraceo-elliptica v. obovata rugulosa atque grosse toruloso-tuberculata stipite brevissimo suffulta; perithecia semiimmersa globosa papillulato-ostiolata ; asci cylindracei paraphysati octospori ; sporidia submajuscula navicularia fuliginea.

Hab. Ad caudices muscosos putrescentes in sylvis prope *Apiahy*, Jan. 1888 (sub n. 2909).

Obs. Stromata sparsa v. hinc inde laxe gregaria erecta rigida fragilia, extus atra v. atro-fusca, intus albo-farcta; stipes subcylindraceus teres v. subcompressus plus minusve evolutus (2-5''' lg. × 1''' crs.) in juventute dense minuteque atro-hirsutus in senectute saepius glabratus longitudinaliter rugosus abrupte in clavula productus; clavula recta erecta forma magnitudineque varia, apice sterili nullo (10-15''' lg. × 2,5-4''' crs.), ubique dense grosseque tuberculato-torulosa ob perithecia subdemersa, extus atro-fusca glabra, intus pulpa sublignea alba farcta; perithecia majuscula (600-1000 μ dm.) globosa, stromate plus minusve insculpta ac prominula, atra, extus (sub lente) minutissime ruguloso-rimulosa, centro ostiolo minuto papillulato obtuso donata, intus pulpa mucosa fusca repleta; asci cylindracei apice subtruncato-rotundati crassissime tunicati deorsum in pedicello longiusculo attenuati (p. sp. 200 × 8-10 μ — pd. 50-70 × 3-5 μ) paraphysibus filiformibus obvallati octospori; sporidia recte monosticha cymbaeformia (20-22 × 6-7 μ) utrinque acutiuscule obtusata continua subopace fuliginea. Species pulchella minuta pluribus aliis affinis, sed notis fructificationis ac habitu mox dignoscenda.

270. Xylaria tigrina Speg. (n. sp.)

Diag. Xylocoryne; clavula ovata atra, minute cinereo-tigrina stipite aterrimo velutino; perithecia majuscula immersa globosa; asci cylindracei aparaphysati; sporidia cylindraceo-subnavicularia fuliginea.

Hab. Ad ramos dejectos putrescentes sub folia sternata in sylvis prope *Apiahy*, Apr. 1888 (sine n.).

Obs. Stromata solitaria erecta simplicia; clavula ovata v. elongato-ovata integra obtusa (10-12''' lg. × 7-8''' crs.) inferne abrupte coarctata, intus alba farcta, extus atra v. fusco-atra undique fertilia ac ostiolis non v. vix prominulis, areola polygona angulosa (200-600 μ dm.) cinera-

scente subfurfuraceo-compactiuscula saepius cinctis ornata; stipes e base saepius umbilicata clavulae enatus rectus (20''' lg. × 2''' crs.) irregulariter compressus v. subtortus minute densissimeque atro-velutinus; perithecia subcorticalia dense stipata globoso-depressa (1000-1500 μ dm. × 600-800 μ alt.) non prominula ostiolo vix papillulato stroma perforante ac non v. vix exerto ornata, pulpa fuscescente farcta; asci cylindracei antice rotundati postice longiuscule pedicellati (p. sp. 250-300 × 10-12 μ), 4-8-spori aparaphysati; sporidia recte v. suboblique monosticha cylindracea v. subnavicularia (30-40 × 8-16 μ) utrinque plus minusve acute rotundata leniter curvula, primo grosse 1-v. 2-guttulata, dein continua fuliginea subopaca. Species nobilissima habitu externo nec non sporidiorum fabrica mox dignoscenda.

271. Ustulina brasiliensis Speg. — Sacc., l. c. f. 351.
Hab. Ad truncos dejectos putrescentes prope *Freguesia de Ribeira*, Maj. 1881 (sub n. 1504).

272. Ustulina vulgaris Tul.? — Sacc., l. c. p. 351.
Hab. Ad ramos majores arborum dejectos putrescentes in sylvis prope *Apiahy*, Hiem. 1881 (sub n. 1683).
Obs. Forma juvenilis adhuc sterilis, stromate extus cinereo-caesio minute laxeque nigro-punctulato, intus ligneo-albo farcto.

273. Daldinia concentrica (Bolt.) Ces. et DNtrs. — Sacc., l. c. f. 393.
Hab. Ad truncos dejectos putrescentes in sylvis prope *Apiahy*, Aest. (sub n. 459).
Obs. Specimina senescentia sterilia sed habitu atque stromatis fabrica interna cum typo plane congruentia.

274. Nummularia punctulata (B. et Rav.) Sacc.? — l. c. f. 399.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2374).

Obs. Specimina sterilia sed characteribus externis cum typo perfecte congruentia.

275. Sphaerella apiahyna Speg. (n. sp.)

Diag. Maculae arescenti-impressae determinatae rufescentes hypophyllae; perithecia sparsa globulosa immersa; asci obclavati; sporidia cylindraceo-clavulata hyalina.

Hab. Ad folia languida coriacea *Ericaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1888 (sub n. 2580).

Obs. Maculae sparsae superne vix manifestae fuscescentes indeterminatae, ad hypophyllum irregulariter suborbiculares (1–3''' dm.) epidermide orbatae impressae subferrugineae linea tumidula limitatae; perithecia hypophylla in maculis laxe gregaria v. sparsa globulosa minuta (90–120 μ dm.) atra glabra coriacella, contextu parenchymatico parum distincto vix papillulato ostiolata; asci obclavulati antice obtusissime rotundati postice breviter crasseque stipitati (40 $\times$ 10 μ) octospori aparaphysati; sporidia 2-v. 3-sticha cylindraceo-clavulata (9-10 $\times$ 3 μ) utrinque obtusiuscula 1-septata non v. vix constrictula loculo supero subbreviore atque subcrassiore hyalina.

276. Sphaerella Puiggarii Speg. (n. sp.)

Diag. Maculae epiphyllae minutae candidae determinatae; perithecia lenticularia minuta atra; asci obclavulati; sporidia elliptico-obovata, hyalina.

Hab. Ad folia viva *Bouddleiae* speciei cujusdam in dumetis prope *Apiahy*, Hiem. 1888 (sub n. 2727).

Obs. Maculae candidae determinatae irregulariter suborbiculares (1–2''' dm.) arescenti-candidae, ad epiphyllum nudae perspicuae, ad hypophyllum tomento foliari tectae ac, luce interjecta, vix visibiles; perithecia in centro macularum 1–5–aggregata, minute punctiformia (100-120 μ dm.) atra, in vivo hemisphaerico-lenticularia in sicco collabe-

scentia innato-prominula, glabra, tenui-membranacea, contextu parenchymatico olivaceo, ostiolo minutissimo perforata; asci obclavati apice rotundati crasseque tunicati, base brevissime grosseque stipitati (50 × 10-15 μ) octospori aparaphysati; sporidia 2-3-sticha elliptica v. elliptico-obovata (16-18 × 4-5 μ) utrinque acutiuscule rotundata, medio 1-septata, non v. vix subconstricta (an demum triseptata?) hyalina.

BIZOZZERIA Speg. (n. gen.)

Char. Perithecia superficialia globosa coriacea atra; asci octospori paraphysati; sporidia botuliformia 1-septata, e hyalino chlorina.

Obs. Genus memoriae amici carissimi *J. Bizozzero* patavino botanicae et mycologiae meritissimi dicatum. An melius *Allantosporis*, una cum *Kakosphaeria* Speg., adscribendum?

277. BIZOZZERIA DIDYMA Speg. (sp.)

Diag. Perithecia dense constipata superficialia atra glabra breviter crasseque stipitulata, mox profunde umbilicato-collapsa; asci clavulati longe stipitati octospori paraphysati; sporidia allantoidea 1-septata fumoso-chlorina.

Hab. Ad corticem crassiorem putrescentem arborum in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2534).

Obs. Perithecia dense constipata sed semper discreta plagulas atras latiusculas (20-100''' lg. × 10-20''' lt.) efficientia, in vivo globulosa (600-750 μ) in sicco saepius profunde collapso-umbilicata atque, e mutua pressione, subtrigono-angulosa, base pedicello brevissimo crassoque suffulta glabra, oculo nudo laevia, sub lente valida minutissime pruinuloso-papillosa atro-fusca, subiculo destituta, crassiuscule subcoriacea, contextu opaco indistincto olivaceo, ostiolo minutissimo non v. vix perspicuo perforata; asci clavulati (200 μ lg. tot.) superne subtruncato-rotundati crassiusculeque tunicati, inferne longe attenua-

to-pedicellati (p. sp. 65-70 × 10-12 μ — ped. 110-130 × 2-5 μ) octospori, paraphysibus filiformibus densiusculis obvallati; sporidia cylindracea saepius curvula utrinque obtusa (20 × 6 μ) primo continua granuloso-farcta hyalina, dein medio 1-septata non constricta fumoso-chlorina. Jodi ope nulla! Species nobilissima habitu fere lichenino, primo obtutu, *Trichosphaeriae acanthostromae* (Mntgn.) Sacc. (*Sphaeria foveolata* B. et R.) simillima sed mox subiculi setularumque deficientia dignoscenda.

278. Enchnosphaeria? spinulosa Speg. (n. sp.)

Diag. Perithecia epiphylla sparsa globulosa fusca, superne appendicibus pluribus divaricatis stellato-patulis longiusculis canescentibus ornata; asci cylindracei octospori paraphysati; sporidia cylindracea majuscula 7-septata hyalina.

Hab. Ad folia viva *Sapindaceae* cujusdam in dumetis prope *Apiahy,* Jul. 1888 (sub n. 2342).

Obs. Perithecia epiphylla sparsa v. laxe gregaria saepius hypothallo tenuissimo e hyalino cinerascente pelliculoso arcte matrice adnato latiuscule vageque expanso insidentia globosa (200-250 μ dm.) sordide cinerascentia, superne appendicibus 5 v. 10 (saepius 6) divaricatis stellato-patulis concoloribus, apice acutis erosulis pallescentibus (250-300 × 30-50 μ), ex hyphis tenuibus olivascentibus dense fasciculatis coalescentibusque efformatis ornata, centro ostiolo minuto perforata, coriacella, contextu atro indistincto; asci cylindracei sursum rotondati subcrassiuscule tunicati, deorsum breviter cuneato-pedicellati (80 × 15-16 μ) densiuscule paraphysati octospori; sporidia oblique 2-3-sticha cylindracea (35 × 6 μ) utrinque subattenuato-rotundata, recta v. leniter subinaequilateralia, 7-septata, hyalina. Iodi ope nulla; gonidia non visa. Species habitu satis lichenino sed a fungis nullo modo separanda.

279. Leptosphaeria? austro-americana Speg. — Sacc., Syll. pyr. vol. II, f. 48.

Hab. Ad folia viva *Plantaginis* speciei cujusdam in pratis uliginosis prope *Apiahy*, Maj. 1888 (sub n. 2460).

Obs. Specimina brasiliensia subimmatura ac notis fructificationis vix recedens ; asci ovati (50 × 25–30 μ) octospori aparaphysati ; sporidia subconglobata subclavulata utrinque obtusiuscula (22–30 × 7-10 μ) primo 1-septata (loculo supero breviore crassiore ac subacutiore) dein 4-blasta, postremo 3-septata ad septum medium vix constrictula hyalina.

280. Leptosphaeria brasiliensis Speg. (n. sp.)

Diag. Maculae amphigenae subdeterminatae fusco-v. cinerascenti-arescentes ; perithecia innato-erumpentia confertiuscula epiphylla globoso-conoidea atra laevia ; asci mox diffluentes; sporidia triseptata subfusiformia olivacea.

Hab. Ad folia viva *Xanthoxyleae* v. *Anacardiaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1888 (sub n. 2365).

Obs. Maculae majusculae (5–15''' dm.) irregulariter orbiculares saepius confluentes determinatae amphigenae, inferne fuscae, superne pallidiores, centro cinerascentes ; perithecia epiphylla in maculis densiuscule gregaria, conoideo-prominula (150–180 μ dm.) atra glabra coriacella, contextu indistincto olivaceo ; asci non visi mox diffluentes ; sporidia elliptico-subfusiformia (25–30 × 6–8 μ) utrinque acutiuscula, primo 1-septata, dein 3-septata, ad septum medium vix constricta, recta v. inaequilateralia olivacea. An *Hendersonia?*

281. Leptosphaeria Puiggarii Speg. (n. sp.)

Diag. Maculae fuscae minutae indeterminatae ; perithecia, globosa infossa seriata, atra glabra ; asci fusoidei octospori paraphysati ; sporidia fusoidea 5-septata mellea.

Hab. Ad folia emortua *Andropogonis saccharoidis* in pratis prope *Apiahy*, Aut. 1888 (sub n. 2587).

Obs. Maculae amphigenae fusco-rufescentes lineares indeterminatae saepe centro subcinerascentes ; perithecia parenchymate omnino immersa sparsa v. saepius laxe seriata, globoso-lenticularia (200-250 μ dm.) atra glabra, contextu parenchymatico denso olivaceo, ostiolo minuto papillulato carbonaceo epidermidem matricis perforante ac subexertulo atro coronata ; asci fusoidei v. subclavulati antice attenuati ac obtuse rotundati crassiuscule tunicati postice breviter cuneato-pedicellati (90-100 × 20 μ) octospori paraphysibus filiformibus densis obvallati ; sporidia oblique disticha elliptico-subfusoidea (28-30 × 8-9 μ) v. lenissime subfusoideo-clavulata, utrinque acutiuscule rotundata recta v. subcurvula, 5-septata, ad septa constrictula, loculo cuarto supero crassiore tumidioreque, pallide mellea

PSEUDOMELIOLIA Speg. (n. gen.)

Char. Perithecia in thallo pelliculoso tenuissimo atro mox evanescente dense constipata superficialia globosa ostiolata carbonacea ; asci octospori paraphysati ; sporidia cylindraceo-subfiliformia continua guttulata chlorina.

Obs. Genus pulchellum habitu ac vegetatione *Parodiellae*, sed sporidiorum fabrica praedistinctum. An melius inter *Perisporiaceas* adscribendum ?

282. PSEUDOMELIOLIA BRASILIENSIS Speg. (n. sp.)

Diag. Perithecia epiphylla hinc inde glomerulata atra globoso-ovata, minute papillulato-ostiolata ; asci elliptico-ovati octospori paraphysati ; sporidia lineari-fusoídea curvula e chlorino olivacea.

Hab. Ad folia viva *Araucariae brasiliensis* prope *Apiahy*, Aut. 1888 (sub n. 2775).

Obs. Maculae nullae ; subiculum atrum membranaceo-crustaceum vix evolutum ; perithecia epiphylla saepius densissime 5-100-constipata, plagulas atras granulosas difformes (1-5‴ lat.) hinc inde efficientia, globulosa v. ovata

(200-250 μ dm.) non v. vix umbonatulo-ostiolata, atra, primo pilis paucis canescentibus brevissimis adspersa dein glabrata laevia subcarbonacea, contextu indistincto atro-olivaceo; asci elliptico-ovati (40-45 × 10-12 μ) antice subtruncato-rotundati subcrassiuscule tunicati, postice brevissime crasseque pedicellati, paraphysibus valde longioribus filiformibus flexuosulis saepe ramulosis gracilibus obvallati octospori; sporidia conglobata lineari-fusoidea (30 × 3 μ) curvula, praecipue ad apices, utrinque acutiuscula, guttulata continua, primo hyalina dein olivascentia.

HYPOCREACEAE DNtrs.

283. Nectria heterospora Speg. (n. sp.)

Diag. Perithecia subsparsa globosa collabescentia carnea laxe albo-villosula; asci difformes mox diffluentes saepius octospori; sporidia elliptica didyma, unum in quoque asco maximum verruculosum, caetera minuta laevia hyalina.

Hab. In thallo *Stictinae* et *Physciae* cujusdam vulgata in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 124-126-524-2617).

Obs. Perithecia superficialia sparsa v. hinc inde 2-5-aggregata, in vivo globulosa (300 μ dm.) in sicco cupulato-collapsa carnea pilis sparsis erectis flexuosulis septulatis apice integris obtusis (100-250 × 5-7 μ) hyalinis adspersa, vix papillulato-ostiolata carnosulo-membranacea, contextu indistincto fulvo-carneo; asci primo cylindracei v. subclavulati (35-45 × 10-14 μ) mox saccato-v. toruloso-difformes ac diffluentes; sporidia primo omnia aequalia, dein dimorpha, alia fertilia (saepius unum tantum in quoque asco) magna ellipsoidea (40-60 × 20-30 μ) medio 1-septata non v. parce constrictula minute denseque asperula,

alia abortiva ? minuta (10-12 × 5-6 μ) elliptica medio 1-septata non v. vix subconstrictula laevia (an quandoque minutissime subrugulosa ?), omnia primo hyalina dein pallide fuscescentia. Iodi ope sporidia fertilia flavescunt. Huc ducenda *N. lecanodes* Wint. (nec Ces.) in *Rabh.* Fung. eurp. n. 3252 edita. An *N. lecanodes* Ces., cum qua notis externis eximie congruit, tantum varietas ?

284. Nectria oidioides Speg. (n. sp.)

Diag. Perithecia hypophylla laxe gregaria globulosa aurantia astoma, subiculo arachnoideo-pelliculoso candido insidentia ; asci fusoidei octospori aparaphysati ; sporidia clavulata 1-septata hyalina.

Hab. Ad folia viva *Sapindaceae* cujusdam in dumetis prope *Apiahy,* Apr. 1881 (sub n. 1507).

Obs. Subiculum glabrum, maculas orbiculari-effusas (1-3''' dm.) tenuissimas candidas hypophyllas efficiens, ex hyphis dense intricato-ramulosis (2–4 μ crs.) hyalinis continuis v. parce septulatis, hyphopodiis destitutis, compositum ; perithecia in centro subiculi laxe gregaria v. sparsa superficialia globosa minutissima (80–90 μ dm.) pallide mellea glabra v. vix papillosa astoma carnosulo-membranacea, contextu indistincto pallide fulvo ; asci fusoidei (50–60 × 9-10 μ) antice obtuse rotundati crassiusculeque tunicati, deorsum cuneati minuteque pedicellati octospori aparaphysati ; sporidia disticha clavulata (20 × 4 μ) superne obtuse inferne acutiuscule rotundata, medio 1-septata non constricta hyalina. An ob ostioli deficientiam melius novum genus ?

285. Nectria puberula Speg. (n. sp.)

Diag. Lasionectria ; perithecia globoso-cupulata superficialia gregaria carneo-aurantia albo-puberula ; asci clavulati aparaphysati ; sporidia cylindraceo-fusoidea 1-septata hyalina.

Hab. Ad culmos dejectos putrescentes *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, Hiem. 1888 (sub n. 2386).

Obs. Perithecia superficialia 15-30 constipata, plagulas irregulares (1-3''' dm.) hinc inde efficientia, in vivo globosa (120-150 μ dm.) in sicco saepius cupulato-collapsa, lateritio-v. carneo-aurantia, pilis minutis albis breviusculis (30-80 × 5 μ) continuis simplicibus hyalinis v. chlorinulis laxe adspersa, saepe base hyphis paucis gracilibus (2-3 μ crs.) laxe ramuloso-intricatis cincta, carnosulo-membranacea, contextu indistincto aurantiaco, ostiolo minuto vix papillulato ornata; asci clavulati (55-60 × 8-10 μ) sursum subattenuati apiceque rotundati v. subtruncati, deorsum cuneati atque in pedicello brevi producti, octospori aparaphysati; sporidia recte v. oblique disticha subfusoidea (16-24 × 4 μ) utrinque obtusiuscula medio 1-septata non v. vix constrictula, loculis non v. 2-guttulatis, recta v. leniter inaequilateralia hyalina. Species nobiliuscula *N. hirtellae* S. et S. accedens, satis tamen ab ea distincta.

286. Nectria lichenophila Speg. (n. sp.)

Diag. Perithecia sparsa superficialia globosa non collabescentia, carneo-mellea laxe albo-puberula; asci cylindraceo-clavulati 4-spori aparaphysati; sporidia elliptico-fusoidea utrinque acuta didyma hyalina.

Hab. In laciniis thalli *Physciae* cujusdam in sylvis prope *Apiahy*, Hiem. 1881 (sine n.).

Obs. Perithecia sparsa v. hinc inde 2-5-gregaria superficialia in vivo globosa (200-250 μ dm.) in sicco contracto-rugosa, pilis paucis subdiffluentibus hyalinis continuis (50-100 × 4-5 μ) laxe vestita, base hyphis nonnullis ramuloso-intertextis (3-4 μ crs.) septulatis cincta, pulchre aurantia v. carneo-mellea membranaceo-carnosula, contextu minutissime parenchymatico parum distincto fulvo-aurantio, ostiolo vix papillulato donata; asci cylindraceo-clavulati

apice rotundati deorsum attenuato-pedicellati (p. sp. 40-45 × 15 μ — ped. 10-20 × 4-8 μ), 4-spori, aparaphysati; sporidia recte disticha, elliptico-fusoidea (22-25 × 7-8 μ) utrinque acutissima, medio 1-septata parceque subconstricta hyalina. Species vix peritheciis pilosulis atque ascis tetrasporis a *N. lichenicola* (Ces.) Sacc. recedens.

287. Nectria episphaeria (Tod.) Fr. — Sacc., l. c. f. 497.

Hab. Ad ostiola *Nummulariae* cujusdam ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Apr. 1888 (sub n. 4677).

Obs. Specimina brasiliensia a typo nonnihil deflectentia. Perithecia solitaria v. laxe 2-5-gregaria superficialia ovata (140-150 μ alt. × 100-120 μ dm.) aurantio-coccinea, subpellucida glabra tenui-membranacea contextu parenchymatico, in ostiolo prosenchymatico-fimbriatulo, donata; asci diffluentes non visi; sporidia primo elliptica, ovoidea v. subbiconica medio 1-septata non constricta laevia hyalina, dein ellipsoidea, medio 1-septulato-constrictula (8-10 × 4-5 μ) lenissime striatulo-subverruculosa ac subfumosa.

288. Nectria? Puiggarii Speg. (n. sp.)

Diag. Subiculum submembranaceo-gossypinulum candidum; perithecia subiculo immersa fusco-coccinea; asci cylindraceo-fusoidei octospori aparaphysati; sporidia ellipsoidea 1-septata hyalina.

Hab. Ad clavulas vivas *Xylariae ippoglossae* Speg. in caudicibus putrescentibus prope *Apiahy*, Maj. 1888 (sub n. 2892).

Obs. Subiculum tenuissime membranaceo-tomentosulum compactiusculum ex hyphis tenuibus (2,5-3 μ crs.) dense intricato-ramulosis hyalinis subcontinuis efformatum, album late expansum; perithecia densiuscule aggregata in matrice superficialia, subiculo immersa glabra e globoso

ovata (120-150 μ dm.) tenui carnosulo-membranacea contextu parenchymatico aurantio-fulvello donata, ostiolo non v. vix papillulato subfuscescente coronata; asci apice truncati base breviter attenuato-pedicellati (65-80 × 8 μ); sporidia oblique mono-v. di-sticha obovato-ellipsoidea v. biconica (10-16 × 5-6 μ) utrinque obtusiuscula, saepe 4-guttulata, episporio laevi v. lenissime striato, hyalina. Species notis perplurimis priori accedens, sed subiculi praesentia praecipue recedens et tandem generi *Hypomyceti* vergens!

289. Nectria coccogena Speg. (n. sp.)

Diag. Eunectria; perithecia globulosa dense constipata crusta stromatica insidentia glabra obscure aurantia; asci cylindracei aparaphysati; sporidia elliptica utrinque obtusa hyalina.

Hab. Ad *Coccos* emortuos in foliis vivis *Eugeniae* speciei cujusdam, prope *Apiahy*, Aut. 1888 (sub n. 2338).

Obs. Perithecia crusta stromatica tenui matricem vestiente adnataque pallide aurantia insidentia, globulosa (120-150 μ dm.) dense constipata subconfluentia, vix ostiolo papillulata, primo pruinula subgossypinula hyalina adspersa, mox glabrata nuda obscure aurantia, carnoso-membranacea, contextu parenchymatico sinuoso parum distincto donata; asci cylindracei (100-120 × 14-16 μ) sursum leniter attenuati apice truncato-rotundati, deorsum modice attenuato-pedicellati octospori, aparaphysati; sporidia oblique monosticha v. subdisticha elliptica (20-26 × 8-10 μ) utrinque obtusiuscula medio 1-septata non constricta recta v. lenissime inaequilateralia, primo hyalina laevia, dein subrufescentia minutissimeque longitudinaliter striolata? Cum *N. coccorum* Speg. non comparanda.

290. Nectria Balansae Speg. — Fung. guar. pug. I, n. 203.

Hab. Ad corticem putrescentem arborum in sylvis prope *Apiahy*, Hiem. 1881 (sub n. 1680).

Obs. Specimina brasiliensia vix a typo recedunt. Perithecia minuta (400–800 μ dm.) densissime constipata citrina v. aurantia, in sicco ruguloso-compressa, squarrulosa v. hyphis paucis gracilibus (5–8 μ crs.) ornata, membranaceo-carnosula, contextu grosse celluloso-parenchymatico; asci cylindraceo-clavati (100–110 × 15–18 μ) apice truncati deorsum attenuato-pedicellati, octospori, aparaphysati; sporidia recte v. oblique disticha, elliptico-biconica (18–22 × 8–10 μ) utrinque obtusa primo 4-guttulata, dein 1-septato-constricta, longitudinaliter rugulosa, perdilute fumosa.

291. Nectria vulgaris Speg. — Sacc., l. c. f. 483.

Hab. Ad cortices dejectos putrescentes in hortis prope *Apiahy*, Hiem. 1881 (sine n.).

Obs. Perithecia aurantio-flava primo albo-squarrulosa, dein glabrata globosa (250-300 μ dm.), non v. vix collabescentia; asci cylindracei (40-45 × 7-8 μ) octospori non v. parcissime paraphysati; sporidia elliptica v. elliptico-subbiconica utrinque truncata (9–11 × 3–4 μ) laevia hyalina.

292. Metanectria ? sigmatospora Speg. (n. sp.)

Diag. Perithecia gregaria innato-superficialia globosa albo-rosea glabra; asci subcylindracei 32-spori aparaphysati; sporidia fusoideo-sigmoidea utrinque setigero-caudata 1-septata hyalina.

Hab. Ad lacinias vivas *Physciae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 124).

Obs. Perithecia hinc inde praecipue in apicibus laciniarum matricis, densiuscule gregaria, innato-superficialia globosa v. globoso-depressula (300-450 μ dm.) glabra laevia albo-carnea v. rosea, ostiolo non v. vix perspicuo saepius

nigricante ornata, carnosula, contextu indistincto albo-roseolo; asci cylindracei (130-150 × 15-20 μ) sursum non v. vix subattenuati apice rotundati crassiusculeque tunicati, deorsum leniter attenuati baseque brevissime crasseque pedicellati, 32-spori, aparaphysati muco immersi; sporidia polysticha fusoideo-sigmoidea (50-60 × 3-4 μ) utrinque setula rectiuscula rigidula aucta (crp. spr. 22-25 μ lg. — set. 15-16 × 1 μ) medio 1-septata non constricta hyalina. Jodi ope nulla!

293. Hypocrea virescenti-flava Speg. (n. sp.)

Diag. Euhypocrea; stromata sparsa v. gregaria pusilla pezizoidea sessilia citrino-flava; perithecia globosa immersa; asci cylindracei aparaphysati; sporidia didyma, loculis e cuboideo globosis, olivacea.

Hab. Ad culmos dejectos putrescentes *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, Hiem. 1888 (sub n. 2353).

Obs. Stromata sparsa v. hinc inde 2-3-aggregata rarius confluentia pezizoidea (1-1,5''' dm.) sessilia, inferne hemisphaerico-turbinata, superne applanata margine obtusa subrepanda, disco minute denseque subrufescenti-punctulata, contextu carnosulo indistincto e virescente flavescente; perithecia densiuscule gregaria immersa subsuccineo-aurantia, globosa (200-250 μ dm.) ostiolo non v. v. vix papillulato-exerto donata; asci cylindracei (100-110 × 6-7 μ) apice subtruncato-rotundati deorsum breviter attenuato-pedicellati octospori aparaphysati; sporidia e loculis duobus globoso-cuboideis (6 × 6 μ) olivaceis mox secedentibus efformata. Ab *H. subcitrina* K. et C. vix sporidiis minoribus fuscescentibusque differt, atque ab *H. citrinella* Ell. sporidiorum colore atque fabrica recedit.

294. Hypocrea Puiggarii Speg. (n. sp.)

Diag. Euhypocrea; sparsa v. gregaria ex hemisphaerico

lenticularia extus coccinea intus alba; perithecia immersa difformia minuta; asci cylindracei; sporidia didyma, loculis e globoso cuboideis, hyalina.

Hab. Ad ramos dejectos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1630).

Obs. Stromata sparsa v. gregaria rarius confluentia primo lenticularia utrinque convexula dein hemisphaerica superne convexa inferne subapplanata (1–5‴ dm.) margine obtusa integra v. vix repanda, extus coccinea, in vivo laevia, in sicco subrugulosa, intus dura subcoriacea alba saepius obsoletissime concentrice zonulata; perithecia periphaerica sub cortice densissime constipata non prominula astoma?, globulosa (100-150 μ dm.) v. e mutua pressione difformia, contextu indistincto pallide rubescente; asci cylindracei antice truncato-rotundati, deorsum breviter attenuato-pedicellati (70-80 × 4,5-5 μ) octospori aparaphysati; sporidia recte monosticha didyma, loculis subcuboideis (4 × 4 μ) mox secedentibus 1-guttulatis, laevia hyalina. Species nobilissima *H. hematoplacae* Mntgn. certe peraffinis, sed peritheciis non prominulis praecipue recedens.

295. Calonectria ambigua Speg. — Sacc., l. c. f. 544.

Hab. Ad folia viva *Laurineae* cujusdam in nemorosis prope *Apiahy*, Jul. 1881 (sub n. 1507).

296. Calonectria leucorrhodina Speg. — Sacc., l. c. f. 548.

Hab. In *Lichenibus* atque *Perisporiaceis* ad folia viva arborum plurimarum prope *Apiahy*, per ann. 1881-88 (sub n. 1442 et sine n.).

297. Calonectria lichenigena Speg. (n. sp.)

Diag. Perithecia coespitulosa stromate tubercularieo tecta v. juncta, erumpentia carneo-aurantia glabra; asci cylindracei octospori; sporidia ellipsoidea 3-septata hyalina.

Hab. In thallo lichenino quodam ad cortices languidos *Apiahy*, Jul. 1881 (sine n.).

Obs. Coespituli superficiales v. e rimulis thalli erumpentes subpezizoidei (1-1,5‴ dm.) superne hemisphaerici v. applanati, margine repandi obtusi pallide aurantii v. carneo-aurantii, glabri, laeves v. colliculosi; perithecia in coespitulis 2-8-gregaria stromate tubercularieo saepe tecta v. prominulo-exerta, in vivo globulosa (180-220 μ dm.) in sicco subcollabescentia pallide roseo-aurantia, ostiolo vix v. non prominulo saepius fuscescente ornata, membranaceo-carnosula, contextu grosse parenchymato subhyalino donata; asci e cylindraceo subfusoidei apice subtruncato-rotundati base breviter attenuato-pedicellati (80-120 × 15-20 μ) magnitudine saepius ludentes mox fluxiles 2-4-6-8-spori aparaphysati; sporidia oblique monosticha v. recte disticha elliptica (28 × 8-12 μ) utrinque obtusa recta v. inaequilateralia 3-septata, ad septa non constricta, loculis omnibus aequalibus, primo hyalina dein subchlorina.

298. Paranectria coespitosa Speg. (n. sp.)

Diag. Perithecia superficialia coespitosa aurantia dense strigoseque albo-gossypina globoso-ovoidea minuta; asci cylindracei dense paraphysati; sporidia elliptico-fusoidea inferne appendice curva v. abrupte angulosa aucta, 3-septata hyalina.

Hab. Ad folia coriacea viva plantae ignotae in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2707).

Obs. Perithecia amphigena 3-20-coespitosa, e globoso ovoidea (300-350 μ dm.) inferne saepius minute substipitulata non v. vix ostiolato-papillulata, pilis longis teretibus flexuosis (100-500 × 3-5 μ) apice integris obtusis dense strigoseque intertextis hyalinis vestita, carnosulo-membranacea, contextu grosse parenchymatico-celluloso (cell. 10-15 μ dm.) e hyalino carneo-aurantio, vix circa ostiolum

fuscescente donata; asci cylindracei v. subclavulati (130-150 × 20 μ) sursum rotundati crassiusculeque tunicati, deorsum attenuati breviter pedicellati octospori dense pseudoparaphysati; sporidia oblique monosticha v. recte disticha elliptico-fusoidea, superne longiuscule obtuseque mucronato-producta, inferne appendice cylindracea v. subclavulata obtusa curvula v. abrupte angulato-flexa aucta (spor. 40 × 9-10 μ — app. 5-10 × 2-3 μ) hyalina, 3-septata non v. vix ad medium tantum subconstrictula.

299. Ophionectria? Puiggarii Speg. (n. sp.)

Diag. Perithecia hypophylla superficialia sparsa globosa sordide succineo-lateritia glabra saepe superne albo-pruinolosa; asci elliptici; sporidia cylindraceo-fusoidea subcurvula 3-septata hyalina.

Hab. Ad folia dejecta putrescentia *Laurineae* cujusdam in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2562).

Obs. Maculae nullae; perithecia in hypophyllo densiuscule sparsa superficialia arcte matrici adnata, in vivo globosa (250-300 μ dm.) in sicco subcorrugato-depressa rufescenti-fusca, glabra laevia, saepius apice e sporis exilientibus crusta v. pruinula alba tecta, vix papillulato-ostiolata carnoso-membranacea, contextu grosse parenchymatico-celluloso parum distincto succineo v. fulvo, circa ostiolum fuscescente donata; asci elliptici (70×20 μ) octospori, aparaphysati? mox diffluentes; sporidia conglobata cylindraceo-fusoidea (60 × 6 μ) utrinque attenuata sed obtusiuscula recta v. leniter curvula, 3-septata non constricta hyalina.

Globulina Speg. (n. gen.)

Char. Perithecia minuta superficialia astoma membranacea lacticoloria subiculo mucedineo radiante phyllogeno insi-

dentia: asci cylindracei octospori aparaphysati; sporidia filiformia septulata hyalina.

Genus habitu *Perisporiaceis* accedens, sed peritheciorum natura melius *Hypocreaceis* adscribendum.

300. Globulina erisyphoides Speg. (n. sp.)

Diag. Perithecia amphigena globosa alba astoma subiculo fibroso-radiante superficiale immersa v. vestita; asci cylindracei; sporidia filiformia hyalina.

Hab. Ad folia viva non coriacea *Compositae* cujusdam herbaceae in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2785).

Obs. Maculae nullae; perithecia hinc inde 3-5-gregaria, rarius solitaria, minutissima (100-150 μ dm.) alba hyphis gracillimis longiusculis (400-600 × 2-3 μ) continuis hyalinis radiantibus vestita, plagulas minutissimas (1-2''' dm.) albas sparsas arachnoideo-oidiaceas efficientia astoma; asci cylindracei (80-90 × 8-10 μ) ubique subcrassiuscule tunicati, apice rotundati deorsum cuneati breviter crasseque pedicellati octospori aparaphysati; sporidia filiformi-cylindracea (75-80 × 2 μ) utrinque obtusiuscula recta v. flexuosula, 15-20-septulata, ad septa non constrictula hyalina.

301. Hypocreella colliculosa Speg. (n. sp.)

Diag. Stromata epiphylla nerviseda subgregaria hemisphaerico-colliculosa, pallide subaurantia glabra; perithecia periphaerica globosa; asci cylindracei aparaphysati; sporidia filiformia in articulis magnitudine ludentibus secedentia, hyalina.

Hab. Ad folia viva *Rubiaceae* arboreae cujusdam in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2339).

Obs. Stromata epiphylla saepius in nervatione primaria, rarius in secundariis, insidentia, arcte matrici adnata, ex orbiculari hemisphaerica (1,5-3''' dm. × 1-1,5''' crs.) sessilia

glabra, ob perithecia prominula dense verrucoso-colliculosa, extus pallide carnea v. aurantia, intus alba; perithecia globosa (250-300 μ dm.) stromate immersa plus minusve prominula ostiolo papillulato vix v. non exerto coronata, contextu carnosulo indistincto; asci cylindracei (200 × 10 μ) apice subtruncato-rotundati, tunica non v. vix incrassata, base subattenuati ac in pedicello brevissimo crassoque producti, octospori aparaphysati; sporidia fasciculata, primo cylindracea septulata, ascorum longitudine, mox in articulis plus minusve elongatis (5-10 × 3 μ) utrinque obtuse rotundatis secedentia.

302. HYPOCREELLA SPEGAZZINII Sacc. — l. c. f. 579.

Hab. Ad folia viva *Coutareae mollis* in dumetis prope *Apiahy*, Maj. 1881 (sub n. 1483).

Obs. Species sub nomine *H. phyllogenae* (Mntgn.) Speg. in Fung. arg. pug. IV, n. 209 edita, a qua tamen secundum Cl. Dr. P. A. Saccardo satis recedens.

303. HYPOCREELLA CITRINA Speg. (n. sp.)

Diag. Stromata hypophylla sparsa hemisphaerico-lenticularia glabra hypothallo hyalino pelliculoso radiante superficiale insidentia, superne applanata ac saepius papillulosa; perithecia globulosa immersa; asci cylindracei aparaphysati; sporidia filiformia continua hyalina.

Hab. Ad folia emortua *Myrtaceae* v. *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2538).

Obs. Stromata hypophylla sparsa v. hinc inde laxe 2-3-gregaria, orbicularia (1-2''' dm.) ambitu integra, inferne non v. vix coarctatula, hypothallo tenuissimo hyalino membranaceo-radiante (3-4''' dm.) facillime a matrice secedente insidenti-adnata, superne saepius applanata, rarius hemisphaerica, primo laevia, dein minute papillulato-aspera, extus glabra, in juventute albescenti-flavescentia, per aetatem citrina, saepe in senectute centro depressa ac sub-

fulvescentia, intus alba, e cellulis cylindraceis brevibus crassis flexuosis obtusis rarius ramulosis hyalinis (30 × 5 μ) dense constipatis composita; perithecia in margine stromatum saepius constipata immersa globosa (250 μ dm.) ostiolo papillulato non v. vix exerto-prominulo ab subsuccineo coronata; asci cylindracei (120-130 × 6-8 μ) v. subfusoidei, apice rotundato-truncati crasse tunicati 1-foveolati, deorsum attenuati in pedicello breviusculo producti octospori aparaphysati; sporidia ascorum longitudine (100-110 × 1 μ) filiformia utrinque attenuato-acutiuscula continua (an semper?) integra, rarius in articulis magnitudine summope ludentibus secedentia hyalina.

304. Cordiceps Puiggarii Speg. (n. sp.)

Hab. In corpore *Polybiae* (*Vespae*) *fasciatae* S. Farg. inter folia coacervata propre *Apiahy*, Hiem. 1881 (sine n.).

Obs. Species in Fung. arg. pug. IV, n. 207 imprudenter sub nomine *C. sphaecophilae* (Kl.) Brk. et C. edita; nunc cum speciminibus typicis cubensibus hujus speciei comparata longe abhorrens videtur. Clavulae sursum in apice conoideo longiusculo acuto sterili attenuatae; cnft. descriptionem in l. c. et in Sacc., Syll. pyr. v. II, f. 568.

305. Cordiceps martialis Speg. (n. sp.)

Diag. Stromata coespitosa erecta glabra majuscula inferne teretia superne compressa simplicia v. saepe furcata aurantiaca carnoso lenta croceo-papillosa; perithecia stromate infossa ostiolo conico exerto ornata minuta; asci cylindracei longissimi aparaphysati; sporidia filiformia gracillima hyalina.

Hab. Ad larvas *Cerambicideae* cujusdam ad caudices cariosos prope *Apiahy*, Aut. 1888 (sub n. 2879).

Obs. Stromata in extremitatibus (in cephalica praecipue) corporis coespitosa, saepe base subfasciculata v. connata, e subiculo furfuraceo-squarruloso totam matricem vestiente

exsurgentia erecta recta v. leniter falcato-curvula (40–50‴ lg.) base teretia (1,5–2‴ crs.) sursum gradatim incrassata apice compressula saepeque subcanaliculato-furcata, carnoso-lenta, glabra, intus alba farcta, extus aurantia, minute denseque ubique ostiolis croceis prominulis (vix hinc inde laevia) exasperata; perithecia stromate immersa globulosa (500–600 μ dm.) dense constipata, superne ostiolo conico obtuso longiusculo (200-300 μ lg. × 50–100 μ crs.) croceo coronata; asci cylindracei (450–500 × 4 μ) fasciculati longissimi aparaphysati octospori, apice obtuse rotundati modiceque incrassato-tunicati, base breviter attenuato-pedicellati; sporidia ascorum longitudine gracillima, primo integra, dein in articulis cylindraceis (5-20 × 1 μ) hyalinis scissilia. Species *C. militaris* (L.) Lk. peraffinis sed stromatum forma atque peritheciis magis infossis satis distincta.

306. Cordiceps australis Speg. — Sacc., l. c. f. 571.

Hab. In corporibus putrescentibus *Formicarum, Lamellicornium, Curculionidum Cassidarumque* vulgata prope *Apiahy*, per ann. 1881-88 (sub n. 2335 et sine n.).

Obs. Stromata subcarnea filiformia erecta, quandoque breviuscula rigidula recta (5-10‴ lg.), quandoque elongata flexuosa subflaccidula (30–60‴ lg.) semper gracilia (0,2–0,4‴ crs.) fusco-atra v. atro-subpurpurascentia, longitudinaliter rugoso-striata (an in sicco tantum ?) glabra opaca apicem versus attenuata ac flavescenti-carnosa, abrupte in capitulo globoso v. ovato (0,5–2‴ dm.) expansa; capitula laevia carnoso-subceracea aurantia glabra acrogena solitaria, rarius pleurogena; perithecia cylindracea (300-600 × 100 μ) non v. vix ostiolato-papillata; asci cylindracei (250–300 — rarius 450– × 5–8 μ) apice glandiformes aparaphysati; sporidia filiformia, ascorum longitudine, in articulis cylindraceo-fusoideis utrinque rotundato-subtruncatis (5–15 × 1-1,5 μ) hyalinis secedentia. Species

variabilis pulcherrima stipite marasmioideo nigro apice pallescente mox dignoscenda; *C. bicephalae* Brk. peraffinis videtur.

307. Cordiceps goniophora Speg. (n. sp.)

Diag. Stromata filiformia gracillima atra simplicia v. ramulosa stipitibus ramisque ad medium abrupte noduloso-incrassatis, apice attenuatis ac capitulo minutissimo roseo-aurantio clavulato ornatis.

Hab. In corpore putrescente *Mutillae* speciei cujusdam inter muscos propre *Apiahy*, Hiem. 1881 (sine n.).

Obs. Stromata sparsa v. e base capitis toracisque nec non ex articulationibus pedum antennarumque exsurgentia setiformia (5-20''' lg. × 0,1-0,3''' crs.) castaneo-atra laevissima opaca rigida recta v. vix flexuosa, inferne in juventute saepe sordide pruinulosa, medio saepius obovato-v. obclavulato-incrassata (1''' lg. × 0,5''' crs.) simplicia v. ramulosa, apice capitulato-incrassata aurantio-rosea; perithecia asci sporidiaque ob immaturitatem deficiunt. Species praedistincta priori peraffinis sed longe minor ac magis gracilis; recedit etiam stipitibus subcorneis laevibus geniculato-inflatis. Crassitudines nodulorum stipitis sine ullo dubio sunt clavulae vetustae apice innovanti-proliferae.

308. Cordiceps sphyngum (Tul.) Sacc. — l. c. f. 572.

Hab. In corpore putrescente *Lepidopteri* nocturni cujusdam (*Agrotis?*) in sylvis prope *Apiahy*, Jul. 1881 (sine n.).

Obs. Specimina sterilia sed sine dubio ullo hanc speciem sistentia atque cum icone *Cl. Tulasnei* perfecte conveneutia.

309. Megalonectria pseudotrichia (Schw.) Speg. — Sacc., l. c. f. 560.

Hab. Ad corticem trunci dejecti putrescentis prope *Xiririca*, Maj. 1880 (sub n. 138).

310. Megalonectria coespitosa Speg. (n. sp.)

Diag. Perithecia coespitulos subhemisphaericos centro stilbigeros parvulos erumpenti-superficiales efformantia, globosa, sanguinea glabra; asci clavati; sporidia cylindraceo-elliptica horizontaliter 9-septata, septo altero verticali continuo divisa hyalina.

Hab. Ad corticem putrescentem arborum in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2863).

Obs. Stroma tenuissimum sub peridermio immutato latissime excurrens parum perspicuum; perithecia in acervulis erumpenti-superficialibus densiuscule sparsis subhemisphaericis (2–3''' dm.) dense botryose aggregata ac saepius 1 v. 2 stipites conidiiferos centrales cingentia, in vivo globosa (300-350 μ dm.) in sicco collabescentia sessilia testaceo-sanguinea, ostiolo vix papillulato saepe obscuriore ornata, carnosulo-membranacea, contextu parenchymatico elongato parum distincto coccineo donata, glabra laevia; asci primo e cylindraceo fusoidei apice truncati, dein e cylindraceo clavulati (90 × 20 μ) apice obtuse rotundati, tunica non v. vix incrassata, base brevissime crasseque stipitati octospori aparaphysati; sporidia recte v. oblique disticha (30–40 × 10 μ) cylindraceo-elliptica utrinque obtusiuscula recta v. leniter subcurvula, horizontaliter 9-septato-constrictula (ad medium validius), septo altero verticali continuo divisa, hyalina. Stipites conidiiferi *Stilbum fusco-cinnabarinum* Speg. sistunt.

DOTHIDEACEAE Nitz. et Fck.

311. Phyllachora apiahyna Speg. (n. sp.)

Diag. Stromata subhypophylla parvula atra nitentia; locu-

lis 4-12 globosis subprominulis; asci cylindracei octospori paraphysati; sporidia elliptica utrinque obtusissima strato muscoso crasso obovoluta hyalina.

Hab. Ad folia (lanceolata subcoriacea siccitate nigrescentia) plantae ignotae in dumetis prope *Apiahy*, Jul. 1888 (sub n. 2565).

Obs. Maculae nullae v. epiphyllae fuscescentes indeterminatae vix perspicuae; stromata sparsa innata utrinque in folio manifesta irregulariter suborbicularia (1-2‴ dm.) ad epiphyllum submaculaeformia determinata atra plana laevia v. minute punctulato-impressa non v. vix subnitentia, ad hypophyllum subindeterminata v. rugula epidermica cincta, 2-6 hemisphaerico-colliculosa laevissima nitentia (fere e loculis prominulis subconfluentibusque efformata); loculi parenchymate vix mutato immersi globulosi (200-300 μ dm.) albo-farcti; asci primo subfusoideo-cylindracei dein cylindraceo-subtorulosi (90-100 × 12-14 μ) apice obtuse rotundati base breviter crasseque stipitati octospori, paraphysibus filiformibus paucis obvallati; sporidia transverse v. oblique monosticha, rarius recta subdisticha, elliptica v. saepius rhomboideo v. biconico-elliptica (14-15 × 7 μ) granuloso-farcta, hyalina, strato mucoso utrinque attenuato ac subevanescente, medio incrassato, concolore cincta.

312. Phyllachora annuliformis Speg. (n. sp.)

Diag. Stromata hypophylla saepius annulato-expansa, parce prominula atra opaca laevia; loculi numerosissimi constipati non prominuli; sporidia ellipsoidea hyalina.

Hab. Ad folia viva *Laurineae* cujusdam in sylvis prope *Apiahy*, Dec. 1882 (sub n. 2926).

Obs. Maculae nullae v. epiphyllae subfuscescentes indeterminatae vix perspicuae; stromata hypophylla sparsa determinata annuliformi-orbicularia (3-6‴ dm.) centroque tandem libero (1-3‴ dm.) non evoluta, ambitu plus mi-

nusve sinuosulo-repanda, parum dilatata (1''' lt.) primo planissima dein prominula, atra glabra, laevia (v. vix sub lente valida minutissime punctulato-asperula) opaca; loculi numerosissime densissimeque constipati, globulosi 100–150 μ dm.) e mutua pressione angulosi, ostiolo non v. vix papillulato coronati; asci non visi; sporidia ellipsoidea (14 × 8 μ) minute biguttulata, hyalina laevia. Species nobiliuscula sed substerilis; stromata per aetatem cum parte adnata matricis decidua ac folium hinc inde orbiculari-perforatum relinquentia.

313. Phyllachora ? Arechavaletae Speg. (n. sp.)

Diag. Stromata hypophylla orbicularia abrupte pulvinulato-applanata, laevia sordide fusco-v. castaneo-atra subnitentia; loculi periphaerici immersi globulosi; asci obovato-cylindracei aparaphysati; sporidia ovoidea hyalina.

Hab. Ad folia coriacea plantae ignotae prope *Itabirá do Campo* secus *Rio das Velhas*, Sept. 1887 (leg. Cl. I. Arechavaleta).

Obs. Stromata densiuscule sparsa irregulariter suborbicularia (1-2''' dm.) utrinque manifesta, ad epiphyllum prominula determinata sordide obscureque fusca, centro saepius rugoso-v. erosulo-depressa atque subcinerascentia, ad hypophyllum crassiuscule pulvinata (0,5–1''' crs.) base coarctatula, margine integra obtusa superne applanata castaneo-atra, glabra laevissima (sub lente circinatim laxe papillulosa) nitentia; loculi in stromatibus dense constipati subglobosi minuti (120–150 μ), ostiolo parvulo vix papillulato-exerto donati; asci obclavulato-cylindracei, apice subtruncati deorsum modice attenuati brevissimeque pedicellati (100–110 × 10–14 μ) octospori aparaphysati; sporidia oblique mono-v. di-sticha ovoidea (15–18 × 5–6 μ) utrinque obtusa continua grosse 1-guttulata v. saepe diblasta (an demum 1-septata?) hyalina. Species pulchella ob stromata fere superficialia ac spo-

ridia saepe diblasta a genere nonnihil desciscens.

314. Phyllachora biareolata Speg. — Fung. guar. pug. II, n. 99.

Hab. Ad folia emortua *Myrtaceae* v. *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, Hiem. 1888 (sub n. 2538).

315. Phyllachora brasiliensis Speg. — Sacc., l. c. f. 599.

Hab. Ad folia viva *Myrtaceae* v. *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1488-2859).

Obs. Specimina nunc perplurima hujus speciei inspecta, descriptio primitiva (cnft. l. c.) nonnihil modificanda. Maculae nullae ; stromata ad hypophyllum foveola impressa manifesta, ad epiphyllum innato-superficialia pulvinulata irregulariter ellipsoidea v. sublinearia (1-2''' lg. × 0,5-1''' lt.) nervationibus secundariis pinnatis parallela, densiuscule sparsa determinata, aterrima nitentissima dense colliculoso-granulata, laevissima, per aetatem irregulariter rimosa ; loculi stromate immersi globulosi (150-200 μ dm.) prominuli albo-farcti, ostiolo impresso minutissimo perforati ; asci e clavato v. subfusoideo cylindracei (80 × 18 μ) apice obtuse rotundati, base brevissíme crasseque pedicellati octospori aparaphysati ; sporidia oblique monosticha rarissime recte disticha, ellipsoidea v. lenissime subovoideo-elliptica (14-16 × 10 μ), continua eguttulata, primo strato diffluente mucoso concolore cincta hyalina, dein nuda obsoletissime fumosa. Species *Ph. astronii* Speg. nec non *Ph. tropicali* Speg. affinis, ab utraque tamen satis distincta.

316. Phyllachora gibbosa Wint. — Sacc., Syll. fung. add. I-IV, p. 226.

Hab. Ad folia viva *Pleromatis* specierum plurimarum in

campis prope *Apiahy*, Aut. 1888 (sub n. 2479-2714-2756).

Obs. Maculae nullae; stromata hypophylla sparsa innato-superficialia aterrima opaca glabra hemisphaerica gibbuloso-tuberculosa (0,5–1''' dm.), 3–8-locularia; loculi stromate immersi vix prominuli e mutua pressione difformes (250–300 μ dm.) saepe confluentes; asci cylindracei apice plus minusve rotundati deorsum longiuscule attenuato-pedicellati (150–200 μ lg. tot. — p. sp. 100–120 × 9-14 — ped. 40–60 × 5 μ) densiuscule pseudoparaphysati octospori; sporidia cylindraceo-elliptica utrinque subtruncato-rotundata magnitudine subludentia (quandoque 12–14 × 6–7 μ — quandoque 16–18 × 8–9 μ) hyalina. *Ph. peribebuyensi* Speg. affinis sed satis tamen distincta.

317. Phyllachora ? gracillima Speg. (n. sp.)

Diag. Stromata minutissima innata plana atra opaca; loculi minuti constipati; asci subfusoideo-clavulati paraphysati; sporidia oblanceolata inferne acuta hyalina.

Hab. Ad folia culmosque *Isolepidis capillaris* in uliginosis prope *Apiahy*, Aut. 1888 (sub n. 2620).

Obs. Maculae nullae v. vix pallescentes, indeterminatae; stromata elliptica minuta (200–300 μ dm.) elliptica v. linearia saepe confluentia ac totum folium ambienta, innata non v. vix prominula atra glabra opaca laevia, contextu indistincto; loculi immersi constipati, saepius e mutua pressione difformes (90–100 μ dm.) albo-farcti; asci e clavulato v. fusoideo cylindracei (50–60 × 10 μ) antice subtruncato-rotundati, base brevissime attenuato-pedicellati, paraphysibus parcis filiformibus longioribus immixti octospori; sporidia obverse lanceolata (15–16 × 5 μ) superne rotundata, inferne attenuato-acutata, continua v. saepe 2-4-blasta (an demum 1-septata ?) hyalina.

318. Phyllachora dispersa Speg. (n. sp.)

Diag. Stromata 1–3-locularia minuta amphigena sparsa atra nitentia; asci subcylindracei dense paraphysati; sporidia elliptica hyalina.

Hab. Ad folia viva *Hireae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2576-2578).

Obs. Maculae nullae; stromata sparsa amphigena, ad epiphyllum applanata, ad hypophyllum 1–3-colliculoso-prominula, innata minuta (0,5–1''' dm.), atra glabra laevissima nitentia; loculi globosi (200–250 μ dm.) solitarii v. pauci in quoque stromate, parum prominuli albo-farcti; asci cylindracei v. subfusoidei (90–110 × 10–14 μ) apice truncato-rotundati crassiusculeque tunicati, deorsum breviter attenuato-pedicellati, non v. parcissime paraphysati; sporidia recte v. oblique monosticha elliptica v. subcylindraceo-ellipsoidea (12 × 5 μ) utrinque obtusiuscule rotundata hyalina continua, in prima aetate saepius tunica concolore mucosa tenuissima obovoluta.

319. PHYLLACHORA PUIGGARII Speg. (n. sp.)

Diag. Stromata epiphylla hemisphaerico-pulvinulata minuta atra nitentia; loculi 1–5 aggregati globoso-difformes; asci clavato-saccati subaparaphsyati; sporidia elliptica saepius muco obovoluta.

Hab. Ad folia (parvula ovata imparipinnata) viva *Leguminosae* arboreae cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2770).

Obs. Maculae nullae v. vix pallescentes indeterminatae; stromata hemisphaerica v. obtuse subconoidea orbicularia 0,5–1''' dm.) epiphylla, ad hypophyllum non manifesta, sparsa innato-superficialia atra glaberrima laevissima nitentissima, subcarbonacea, contextu indistincto; loculi saepius solitarii, rarius 2–5 (quorum 1 v. 2 fertiles, caeteri abortivi) aggregati in quoque stromate, e mutua pressione globoso-difformes (120–150 μ dm.); asci primo cylindracei dein saccato-clavati (80–100 × 15–25 μ) apice

obtusi deorsum attenuati modiceque stipitati, non v. parcissime paraphysati octospori; sporidia recte oblique v. transverse monosticha, rarius disticha, late ellipsoidea (16-18 × 8-9 μ) utrinque obtusissime rotundata, rarissime subrhomboidea v. subinaequilateralia, hyalina, primo granuloso-farcta, strato mucoso crassiusculo concolore vestita, dein nuda.

320. Phyllachora pyrifera Speg. — Sacc., Syll. fung. add. I-IV, f. 225.

Hab. Ad folia viva *Compositae* arborescentis cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2760).

Obs. Specimina brasiliensia notis externis perfecte cum typo congruentia, vix nonnullis fructificationis deflectentia; asci cylindracei antice obtuse rotundati deorsum breve crasseque stipitati (80-100 × 12-15 μ) paraphysati; sporidia obverse pyriformia (18-19 × 9-10 μ) saepe inferne subcoarctata (an demum spurie 1-septata et tandem *Munkiella?*) hyalina.

321. Phyllachora selenospora Speg. (n. sp.)

Diag. Stromata amphigena orbiculari-pulvinata atra nitententia, 4-12-loculigera; asci clavati apice conoideo-acuminati paraphysati; sporidia fusoideo-clavulata falcata hyalina.

Hab. Ad folia viva *Zanthoxyleae* cujusdam in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2566).

Obs. Maculae nullae; stromata discoideo-pulvinulata (1,5-2''' dm.) innato-superficialia, determinata amphigena, sed ex uno latere tantum manifesta, atra glabra nitentia, quandoque laevia, vix centro (sub lente) minute tuberculata, quandoque (rarius) tota subgranulosa; loculi 6-12 in quoque stromate subradiantes e mutua pressione compressi (150-200 μ dm.) ostiolis minutis ad centrum stromatis vergentibus perforati; asci clavulati (90-100 × 14-

20 μ) antice breviter conico-cuneati acutissimi, postice attenuati modice pedicellati octospori parcissime paraphysati; sporidia recte disticha subfusoideo-clavulata (16-20 × 6 μ) utrinque acuta, plus minusve lunato-curvula continua hyalina.

322. Phyllachora sordida Speg. (n. sp.)

Diag. Stromata subhypophylla minuta saepe confluentia innata subapplanata fusco-atra opaca, paucilocularia; asci cylindracei paraphysati; sporidia elliptica utrinque acutiuscula subinaequilateralia hyalina.

Hab. Ad folia viva *Tabebuiae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1583).

Obs. Maculae pallescentes indeterminatae majusculae parum manifestae; stromata hypophylla suborbicularia (0,5-2''' dm.), hinc inde 2-5 aggregato-confluentia, non v. vix prominula fusco-atra laevia glabra opaca, ad epiphyllum punctiformia minutissima non confluentia atra; loculi in quoque stromate 1-3-constipati difformes (120-180 μ dm.) albo-farcti, ostiolo minuto vix perspicuo, ad epiphyllum aperto, donati; asci cylindracei (120-130 × 10 12 μ) apice rotundati base modice attenuato-pedicellati octospori, densiuscule paraphysati; sporidia oblique monosticha elliptica v. subnavicularia (18-20 × 7-8 μ) utrinque acutiuscula hyalina.

323. Phyllachora subrepens Speg. (n. sp.)

Diag. Stromata epiphylla minuta subramosula saepius circinata ac confluentia atra nitentia, paucilocularia; asci subclavulati paraphysati; sporidia ellipsoidea hyalina.

Hab. Ad folia viva *Sapindaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2862).

Obs. Maculae pallescentes indeterminatae parum perspicuae; stromata epi-(rarissime hypo-) phylla, subconoideo-prominula minuta (0,5-1,5''' dm.) saepius aggregata ac con-

fluentia, in nervationibus circumstantibus angulose excurrentia atra laevia glabra nitentia, in maculis irregulariter subcircinato-repentia; loculi in quoque stromate 1 v. 3, globulosi v. compressi (150–200 μ dm.) albo-farcti; asci cylindraceo-clavulati, apice rotundati v. subtruncati, deorsum breviter attenuato-pedicellati (85–90 × 12–16 μ) densiuscule paraphysati octospori; sporidia transverse v. oblique monosticha ellipsoidea (16–18 × 8-9 μ) continua non v. 1-guttulata hyalina. Species habitu *Ph. repenti* (Cd.) Sacc. simillima, sed cum speciminibus nicaraguensibus comparata, satis distincta videtur.

324. Phyllachora trivialis Speg. (n. sp.)

Diag. Stromata innata applanata orbicularia minuta, areola albescente cincta, atra opaca paucilocularia; asci obclavulati parce paraphysati; sporidia elliptico-obovata hyalina.

Hab. Ad folia viva *Asclepiadeae* cujusdam scandentis (an *Jussieae?*) in dumetis prope *Apiahy*, Aut. 1881 (sub n. 1564).

Obs. Stromata irregulariter orbicularia (1–2''' dm.) innata, utrinque in folio manifesta, ad epiphyllum atra glabra laevia v. vix subcolliculosa, irregularia fusca exareolata, contextu subcarbonaceo indistincto; loculi 3–8 in quoque stromate constipati subglobosi (250–300 μ dm.) albo-farcti; asci obclavulati apice subrotundati v. truncati base cuneati brevissime crassiusculeque stipitati (140–150 × 10–12 μ), paraphysibus paucis filiformibus longioribus obvallati, octospori; sporidia elliptico-obovata (16–20 × 5-7 μ) utrinque rotundato-acutiuscula, recta v. subinaequilateralia nubilosa hyalina.

325. Phyllachora vinosa Speg. (n. sp.)

Diag. Maculae epiphyllae majusculae vinosae; stromata laxe aggregata epiphylla minuta saepe confluentia atra subni–

tentia, paucilocularia; asci cylindraceo-torulosi; sporidia ellipsoidea muco obovoluta.

Hab. Ad folia viva *Fici* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1676).

Obs. Maculae ad epiphyllum suborbiculares subindeterminatae majusculae (10–15''' dm.) saepe confluentes violascentes v. vinosae ad hypophyllum irregulares indeterminatae fuscescentes, rarissime deficientes; stromata in maculis subcircinata v. densiuscule sparsa ad epi-(rarius etiam ad hypo-) phyllum perspicua, innata, subhemisphaerico-prominula irregulariter suborbicularia (0,5–1''' dm.) saepeque confluentia atra laevia glabra nitentia, contextu opaco atro indistincto; loculi 1–3 in quoque stromate, 1 tantum saepius fertili, globulosi (150–200 μ dm.) albofarcti; asci cylindracei v. clavulati (90–110 × 15–25 μ) dein torulosi ac diffluentes, muco immersi, antice obtusi postice breviter crasseque attenuato-pedicellati, octospori; sporidia transverse v. oblique monosticha elliptica utrinque obtusa (16–18 × 8–9 μ) nubilosa hyalina, tunica mucosa tenuissima concolore per aetatem evanescente tecta.

326. Munkiella inaequalis (Wint.) Speg. — Wint., Hedw. 1885 f. 261 (sub *Lizonia*).

Hab. Ad folia viva *Mikaniae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2700).

Obs. Stromata innato-prominula, loculis subexertis, in vivo hemisphaericis in sicco subcollabescentibus densissime constipatis confluentibusque tecta; asci recte v. obverse clavati (70-80 × 15-18 μ) apice obtusissime rotundati crasseque tunicati, deorsum cuneati breviter crasseque stipitati, octospori aparaphysati: sporidia disticha elliptico-subfusoidea (18 × 7 μ) utrinque acuta, loculo infero minutissimo conoideo apiculiformi, hyalina.

327. Dothidella pteridophila Speg. (n. sp.)

Diag. Stromata amphigena innato-prominula minuta atra; loculi pusilli dense constipati albo-farcti; asci obclavulati aparaphysati; sporidia elliptico-elongata, medio 1-septata hyalina.

Hab. Ad folia viva v. languida *Pteridis* speciei cujusdam in uliginosis prope *Apiahy*, Aut. 1888 (sub n. 2372).

Obs. Maculae nullae v. totum folium superne fuscescens inferne e cinereo v. glauco purpurascens; stromata epi-v. hypo-phylla innato-superficialia prominula irregulariter e discoideo hemisphaerica (0,5-1''' dm.) atra carbonacea, non v. vix subverruculosa; loculi in stromate dense constipati e mutua pressione subdifformes minuti (90-120 μ dm.) albo-farcti; asci obclavulati (50-60 × 12-14 μ) sursum rotundati crassiuscule tunicati 1-foveolati, deorsum abruptiuscule pedicello crasso brevissimoque suffulti, octospori aparaphysati; sporidia elliptico-elongata v. e cylindraceo clavulata (16-18 × 4-5 μ) utrinque obtusiuscula medio 1-septata non v. vix constricta recta v. leniter inaequilateralia hyalina. Species *D. nerviseqniae* (Brk.) Sacc. affinis sed satis riteque distincta.

328. Scirrhia leptosperma Speg. (n. sp.)

Diag. Stromata amphigena linearia erumpentia fuscescentia vix perspicua; loculi monostichi globulosi; asci obclavulati aparaphysati; sporidia lineari-clavulata hyalina.

Hab. Ad folia viva *Graminaceae* majoris cujusdam in campis prope *Apiahy*, Aut. 1888 (sub n. 2850).

Obs. Maculae nullae v. amphigenae elliptico-lineares indeterminatae e purpurascente fuscescentes; stromata gracillima linearia (1-3''' lg. × 150-200 μ lt.) sparsa, per epidermiden longitudinaliter fissam erumpentia, non v. vix prominula fusca glabra laevia v. vix subtuberculosa; loculi stromate immersi, monostiche seriati, constipati e globoso difformes (100-120 μ dm.) albo-farcti; asci obclavulati (50 × 16 μ) apice plus minusve late v. subtruncate

rotundati crassiusculeque tunicati, pedicello crasso brevissimoque suffulti, octospori aparaphysati ; sporidia disticha lineari-clavulata (20 × 4 μ) superne obtusa inferne acutiuscule rotundata, medio 1-septata lenissime constricta recta hyalina. Species pusilla *S. infuscatae* Wint., ut videtur, affinis.

329. ROUSSOELLA SUBCOCCODES Speg. (n. sp.)

Diag. Stromata hypophylla sparsa v. subcircinantia hemisphaerico-subglobosa minuta innato-superficialia fusco-atra paucilocularia ; asci cylindracei v. clavulati octospori mucoso-diffluentes ; sporidia cylindraceo-obovata excentrice 1-septata, utrinque subtruncata, fuliginea.

Hab. Ad folia (subcoriacea elliptica glabra) viva *Leguminosae* scandentis cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2841).

Obs. Maculae nullae v. indeterminatae pallescentes ; stromata sparsa v. gregaria atque saepe subcircinata, rarius confluentia hemisphaerica v. saepius globulosa (0,5-1^{mm} dm. et crs.) matrici arcte adnata, fusco-atra v. atra glabra ruguloso-subtuberculata subcarbonacea contextu indistincto ; loculi 2 v. 5 in quoque stromate constipati globulosi (120-150 μ dm.) ostiolo non v. vix in stromatis superficie papillato-prominulo donati, fusco-farcti ; asci cylindracei v. clavulati (p. sp. 50-60 × 7-8 μ) apice obtusi base attenuati mox diffluentes octospori ; sporidia oblique mono-v. recte di-sticha obovata, utrinque truncato-rotundata (10-12 × 4-5 μ), septo excentrico divisa, non v. vix constricta, loculo supero majore 2-guttulato, infero duplo minore 1-guttulato, fuliginea. Species cum *Phyllachora coccodi* (Lév.) Speg. (in Sacc., Syll. pyr. vol. I, f. 446 sub *Physalospora*) comparata habitu simillima, fructificationis tamen notis secundum auctoris diagnosin (specimen meum micaraguense sterile) longe recedens ; an ejusdem status adultus ?

Dothidea Munkii Speg. in Fung. guar. pug. I, n. 289, sub hoc genere etiam militat, et *Roussoella Munkii* Speg. vocanda!

330. Montagnella? Puiggarii Speg. (n. sp.)

Diag. Stromata amphigena elliptica minutissima atra laevia opaca; loculi pusilli dense constipati; asci cylindracei v. clavulati aparaphysati; sporidia fusoidea utrinque obtusiuscula 3-septata hyalina.

Hab. Ad folia viva *Oplismeni* speciei cujusdam in sylvaticis prope *Apiahy*, Apr. 1881 (sub n. 2870).

Obs. Maculae nullae v. totum folium sordide fuscescenti-arescens; stromata sparsa elliptica v. elliptico-elongata (0,7-1,3‴) utrinque prominula, obtusa, longitudinalia atra glabra laevia opaca, intus albo-farcta; loculi numerosi globoso-angulosi (90-120 μ dm.) dense constipati saepeque confluentes, albo-farcti; asci cylindracei v. subclavulati (60-70 × 8-10 μ) apice obtuse rotundati base subattenuati brevissime crasseque stipitati octospori aparaphysati; sporidia recte disticha fusoidea (leptosphaerioidea!) utrinque obtusiuscule acutata, recta v. saepius leniter inaequilateralia, primo 4-guttulata dein 4-blasta postremo 3-septata, non constricta, loculo tertio supero crassiore hyalina. *Phyllachora graminis* (Prs.) Fck. var. *tupí* Speg. f. *oplismeni* (in Fung. guar. pug. I, n. 268) facillime huc ducenda, ut status hujusdem immaturus.

331. Ophiodothis? leptospora Speg. (n. sp.)

Diag. Stromata hypophylla innata vix prominula minuta glaucescentia, areola pallescenti-alba stricta cincta, paucilocularia; asci ellipsoidei v. obovati aparaphysati; sporidia cylindracea utrinque attenuato-rotundata continua.

Hab. Ad folia coriacea viva plantae ignotae in sylvis prope *Apiahy*, Aut. 1880 (sub n. 2564).

Obs. Stromata innata sparsa v. hinc inde subaggregata, ra-

rius confluentia minuta (0,5''' dm.) vix ad epiphyllum prominulo-perspicua, cinerascenti-v. glaucescenti-atra, areola pallescenti-alba stricta indeterminata cincta, glabra laevia subcarbonacea, contextu indistincto atro; loculi 2-5 in quoque stromate constipati e globuloso-angulosi (120-150 μ dm.), stromate immersi non prominuli; asci ovati v. ellipsoidei (50-60 × 10-22 μ) sursum attenuato-rotundati, tunica incrassata tenuiter longeque foveolato-perforata donati, deorsum cuneato-rotundati, abrupte brevissimeque coarctato-pedicellati octospori aparaphysati; sporidia conglobata cylindracea utrinque leniter attenuata ac rotundata (40 × 4-5 μ) recta v. curvula continua eguttulata hyalina.

PHYMATOSPHAERIACEAE Speg.

Familiola singularis in tropicis praecipue vigens; genera *Eurytheca* DSeyn. et facile *Cookella* Sacc. huc ducenda.

MICROPHYMA Speg. (n. gen.)

Char. Stromata superficialia atra intus dense loculigera, loculis monoascis; asci octospori; sporidia didyma hyalina.

332. MICROPHYMA PUIGGARII Speg. (n. sp.)

Diag. Stromata superficialia punctiformia globoso-depressa atra; asci pyriformes; sporidia clavulata.

Hab. Ad folia coriacea plantae ignotae in sylvaticis prope *Apiahy*, Aut. 1888 (sub n. 2773).

Obs. Stromata sparsa superficialia in vivo globosa (500-600 μ dm.) in sicco lenticulari-depressa, extus atra laevia glabra, cortice tenui tecta, intus alba ex hyphis hyalinis tortuoso-intestiniformibus (1-2 μ crs.) longiusculis ra-

mulosis apicibus obtusis dense intricatis farcta; asci pulpa immersi densiuscule sparsi pyriformes (30 × 13-15 μ) apice obtusissime crasseque tunicati, deorsum umbonati v. subcuneato-obtusati, octospori; sporidia conglobata obovata v. clavulata (10–13 × 3-4 μ) superne rotundata inferne plus minusve acutata v. obtusata, medio 1-septata constrictula hyalina.

Huc etiam *Microphyma ilicis* (Ell.) Speg. in Ell. Nort.-Am. fung. 1883 f. 319 (sub *Asterina*).

333. Phymatosphaera brasiliensis Speg. (n. sp.)

Diag. Stromata subpezizoidea repandula parvula superficialia atra; loculi densissime constipati; asci obovati; sporidia elliptica horizontaliter 7-septata, septo altero verticali interrupto divisa, hyalina.

Hab. Ad corticem languentem arborum in sylvis prope *Apiahy*, Aest. 1881 (sub n. 1678).

Obs. Stromata e patellari lenticularia (1-3‴ dm.) sessilia v. substipitata, sparsa v. saepius hinc inde dense 3-8-aggregata saepeque subconfluentia glabra laevia v. leniter subtuberculosa, extus atra cortice tenui subcarbonaceo subimperspicue parenchymatico atro tecta, intus carnosula olivascentia dense celluloso-ascigera; asci subsphaeroidei v. obovati (50–60 × 35-40 μ) crasse tunicati octospori, dense congesti, substantia stromatis vix separati; sporidia conglobata elliptica v. ellipsoideo-obovata (24-30 × 12-14 μ) utrinque obtusiuscula recta v. leniter curvula, horizontaliter 5-7-septato-constrictula, ad septum validius, septo altero interrupto verticali divisa hyalina. Species *Phymatosphaerae yunnanensi* (Pat.) Speg. (in Soc. Bot. Franc. 1886 f. 1555 sub *Pyrenotheca*) peraffinis, sed certe satis riteque distincta.

MICROTHYRIACEAE Sacc.

334. Microthyrium? circinans Speg. — Sacc., l. c. f. 665.
Hab. Ad folia viva coriacea plantae ignotae in nemorosis prope *Apiahy*, Maj. 1881 (sub n. 1502).

335. Microthyrium melastomacearum Speg. (n. sp.)
Diag. Perithecia hypophylla dense constipata plagulas orbiculares atras granulosas efficientia, scutato-dimidiata, minuta ostiolata membranacea; asci cylindraceo-clavulati aparaphysati; sporidia clavulata didyma hyalina.
Hab. Ad folia viva *Melastomaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1881 (sine n.).
Obs. Maculae nullae v. amphigenae indeterminatae pallescentes vix perspicuae; perithecia hypophylla scutata (150-250 μ dm.) atra membranacea, contextu minute subprosenchymatico-celluloso fumoso atro donata, ostiolo latiusculo (15-25 μ dm.) pertusa, glabra laevia densissime constipata, subconfluentia, plagulas subcrustaceas subgranulosas atras opacas suborbiculares (3-10‴ dm.) ambitu sinuosulo-repandas efficientia; asci cylindracei v. cylindraceo-obclavati (60-80 × 10 μ) antice obtusissime v. subtruncate rotundati, crasse tunicati 1-foveolatique, deorsum e cuneato rotundati crasseque brevissimeque stipitati octospori aparaphysati; sporidia recte di-v. tristicha clavulata (15-16 × 4-5 μ) medio 1-septato-constricta, loculo supero obtuso, infero acuto, hyalina. Subiculum v. hypothallum plane deficiens.

336. Microthyrium virescens Speg. (n. sp.)
Diag. Maculae arescenti-pallescentes orbiculares mediocres; perithecia hypophylla laxe gregaria minuta ostiolata mem-

branacea; asci ovati aparaphysati; sporidia obovata didyma hyalina.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2478).

Obs. Maculae amphigenae orbiculares (5–10‴ dm.) determinatae arescentes superne cinerascentes inferne pallide pallescentes saepe confluenti-difformes; perithecia hypophylla maculis insidentia sparsa v. densiuscule aggregata dimidiato-scutata (80–100 μ dm.) fusco-olivacea glabra tenui membranacea contextu centro subparenchymatico elongato-radiante margine prosenchymatico integro fulvo-virescente donata, ostiolo latiusculo (20 μ dm.) impresso pertusa; asci ovati (35-40 × 20-25 μ) apice crasse tunicati octospori aparaphysati; sporidia elliptico-obovata (14-15 × 5-6 μ) utrinque obtusiuscula, medio 1-septata non v. vix constricta hyalina.

337. Clipeolum atro-areolatum Speg. — Sacc., l. c. f. 667.

Hab. Ad folia coriacea dejecta in umbrosis prope *Apiahy*, Aut. 1881 (sub n. 1446).

338. Clipeolum brasiliense Speg. — Sacc., l. c. f. 667.

Hab. Ad folia coriacea dejecta in umbrosis prope *Apiahy*, Aut. 1881 (sub n. 1446).

339. Clipeolum dothideoide Speg. (n. sp.)

Diag. Perithecia epiphylla sparsa scutato-adnata minuta atra nitentia saepius areola fusco-purpurascente cincta; asci cylindracei aparaphysati; sporidia oblique monosticha cylindraceo-elliptica, hyalina.

Hab. Ad folia viva *Myrtaceae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2771).

Obs. Perithecia epiphylla dense sparsa v. subgregaria hemisphaerica v. conoidea (250–350 μ dm.) scutato-dimidiatata superficialia atra laevia glabra nitentia subcarbo-

nacea, contextu opaco indistincto, 1-locularia astoma, matrici arcte adnata, areola indeterminata stricta fusco-purpurascente saepius cincta; asci e cylindraceo sub-fusoidei v. leniter obclavulati (75-80 × 8-10 μ) apice obtuse rotundati, tunica vix incrassatula, deorsum cuneati brevissimeque pedicellati octospori aparaphysati; sporidia oblique monosticha v. vix pauca hinc inde recte disticha, elliptico-cylindracea (15 × 5 μ) utrinque obtusiuscula recta v. leniter inaequilateralia, primo continua dein di-blasta (postremo 1-septata?). Species pulchella habitu nec non omnium partium fabrica *dothideacea*, sed sine ullo dubio peritheciis non innatis a matrice heterogeneis atque dimidiato-scutatis donata et tandem *microthy-riacea!*

340. Clipeolum minutissimum Speg. — Sacc., l. c. f. 667.
Hab. Ad epiphyllum *Laurineae* cujusdam in nemorosis prope *Apiahy*, Jun. 1881 (sub n. 1507).

341. Puiggariella apiahyna Speg. — Sacc., l. c. f. 478.
Hab. Vulgata ad folia coriacea putrescentia v. languida Filicum arborumque in sylvis prope *Apiahy*, per ann. 1881-88 (sub 1446 et sine n.).
Obs. Genus pulchellum et species vulgatissima videtur sed saepe sterilis; adsunt quoque specimina speciei cujusdam minoris alba pilosula sed natura lichenina gonidiis minutis (heterogeneis?) praedita sed adhuc semper sterilia inventa.

Trichothyrium Speg. (n. gen.)
Char. Mycelium laxum glabrum atrum ex hyphis parce ramosis utrinque latiuscule appendiculato-membranaceis atque applanato vittaeformibus efformatum; perithecia superficialia subieulo insidentia v. cincta dimidiato-scu-

tata contextu prosenchymatico-radiante atro; asci octospori; sporidia didyma hyalina.

342. Trichothyrium sarciniferum Speg. (n. sp.)

Diag. Hyphae myceliales hyphopodiis suboppositis obovatis pedicellatis, hinc inde ad marginem membranae appendicularis conidia cruciatim tetramera sarciniformia asperula gerentes; perithecia sparsa v. hinc inde laxe aggregata dimidiato-scutata minuta ostiolata glabra; asci obclavati aparaphysati; sporidia obclavata 1-septata, loculo supero minore hyalina.

Hab. Ad folia coriacea *Myrtaceae* cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1626).

Obs. Maculae nullae; mycelium plagulas latiusculas irregulares (5-20''' dm.) epiphyllas sparsas atras laxissime grosseque fibroso-reticulatas, matrici arctiuscule adnatas efformans, ex hyphis rectiusculis subcylindraceis (10 μ crs.) fuligineis septulatis subopacis saepius opposite laxeque ramosis, hyphopodiis e cylindraceo ovoideis (20 × 10 μ) vix 1-cellulari-pedicellatis 1-guttulatis oppositis densiuscule ornatis, utrinque membranaceo-expansis, membrana hyphopodia superante (10-12 μ lt.) tenuiter prosenchymatico-radiante fusca pellucida margine sinuoso-repanda; conidia in sinubus membranae hypharum solitaria breviter graciliterque stipitata subcuboidea (20 × 15 μ) 4-cellularia (cellulis subglobosis dense minuteque verruculosis fuligineis pellucidis); perithecia sparsa v. saepius in axilla ramulorum subiculi sparsa, dimidiato-scutata (120-200 μ dm.) membranaceo-coriacella, in vivo subhemisphaerica in sicco subcollabescentia, ostiolo latiusculo (20 μ dm.) fimbriatulo perforata, atra, glabra laevia, contextu prosenchymatico-radiante densiuscule septulato, ad marginem integra v. vix subrepanda; asci ex ovoideo obclavulati (45-56 × 12-18 μ) antice rotundati crasseque tunicati, postice rotundati brevissime cras-

seque pedicellati octospori aparaphysati; sporidia di-v. tri-sticha clavulata (20 × 5 μ) excentrice 1-septata, non v. vix constrictula, loculo supero minore obtuse subhemisphaerico v. ovato 1-guttulato, infero longiore conoideo obtusiuscule acutato 2-guttulato (an postremo 1-septato?) hyalina. An huc *Micropeltis asterophora* B. et Br.?

343. Trichothyrium? serratum Speg. (n. sp.)

Diag. Hyphae myceliales hyphopodiis ac conidiis destitutae; perithecia sparsa v. hinc inde laxe aggregata dimidiato-scutata ostiolata *bitunicata*; asci ovati, aparaphysati; sporidia elliptico-ovata loculis subaequalibus, hyalina.

Hab. Ad folia viva *Convolvulaceae?* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2772).

Obs. Maculae nullae v. vix pallescentes indeterminatae; mycelium plagulas latiusculas irregulares (2-15''' dm.) epi-(rarius hypo-) phyllas sparsas v. confluentes densiuscule fibroso-reticulatas v. subcrustaceas matrici minute reticulatim ruguloso-bullosae arcte adnatas efformans, ex hyphis rectiusculis subcylindraceis crassis (10-15 μ crs.) fuligineis opacis alterne v. opposite ramosis hyphopodiis destitutis, utrinque membranaceo-expansis, membrana latiuscula (10-20 μ lt.) prosenchymatico-radiante pellucida fusca obtuse irregulariterque serrato-lobata compositum; perithecia parsa v. hinc inde in mycelii centro gregaria dimidiato-scutata (100-120 μ dm.) latiuscule ostiolato-perforata (10-20 μ dm.) coriacella, e *duobus membranis composita*, supera v. externa atra opaca contextu indistincto fragillima, interna tenui subflaccida pellucida contextu prosenchymatico-radiante dense septulato olivacea; asci ovati (30-35 × 14-16 μ) apice obtusi base abrupte minuteque pedicellati octospori aparaphysati; sporidia di-v. tri-sticha elliptico-ovata (14 × 5 μ), 1-septata parce constricta, loculo supero ovato obtusiusculo, infero vix longiore subconoideo, hyalina. Hyphae hujus speciei

Cacteae e genere *Epiphyllo* simillimae. An generis novi typus ob perithecia bitunicata?

BREFFELDIELLA Speg. (n. gen.)

Char. Perithecia dimidiato-scutata mytiliformia, postice loricato-confluentia, ostiolo rotundo v. subrimoso, contextu prosenchymatico-radiante atro donata; asci octospori; sporidia 1-septata hyalina.

Genus pulchellum inter *Hemhysteriaceas* et *Microthyriaceas* medium, Cl. O. Breffeld botanicae mycologiaeque meritissimo dicatum.

344. BREFFELDIELLA BRASILIENSIS Speg. (n. sp.)

Diag. Perithecia obovato-spathulata v. mytiliformia postice lenissime imbricato-confluentia minuta, maculas crustaceas parvulas atras superficiales difformes efficientia; asci elliptici aparaphysati; sporidia didyma hyalina (an semper?).

Hab. Ad folia viva *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, Aut. 1888 (sub n. 2356).

Obs. Maculae nullae; perithecia mytiloideo-spathulata (120-130 μ lg. × 60-80 μ lt. maj.) inter se postice plus minusve cuneato-confluentia leniter fere loricato-imbricata, plagulas irregulariter suborbiculares minutas (0,5-1''' dm.) rarius sublineares, atras crustaceo-rigidulas facile a matrice secedentes efficientia, tenui membranacea, contextu longitudinaliter fibroso-radiante septulato olivaceo donata, ostiolo minuto excentrico postico rotundo v. subrimoso plus minusve perspicuo dehiscentia margine integra; asci elliptici (35 × 12-14 μ) antice obtusi postice attenuati, breviter pedicellati octospori aparaphysati; sporidia elliptica v. elliptico-obovata (12 × 4 μ) medio 1-septata lenissime constrictula recta v. subinaequilateralia, loculo supero non v. vix majore obtusioreque, hyalina; an demum 3-septata ac fusca?

345. Polystomella pulcherrima Speg. — Fung. guar. pug. II, n. 137.

Hab. Ad folia viva *Rubiaceae* herbaceae cujusdam in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2704-2849).

Obs. Stromata epiphylla sparsa v. gregaria saepe subconfluentia orbicularia (0,5-2''' dm.) vix convexula atra opaca glabra, matrice leniter bullosa insidentia, contextu subcarbonaceo vix margine pellucido prosenchymatico-radiante non v. vix subfimbriatulo, ostiolis numerosis elliptico-angulosis (20 × 10 μ) sparsis v. subcircinantibus perforata; loculi v. ansulae numerosi; asci obclavulati (50-70 × 12-15 μ) octospori aparaphysati v. paraphysibus paucis filiformibus obvallati; sporidia oblique disticha v. subtristicha (13-16 × 4-5 μ) loculo supero ovoideo, infero subconoideo hyalina.

Dothidea scutula B. et B. (Sacc., Syll. pyr. II, f. 632 sub *Dothidella*) huc spectat et *Polystomella scutula* (B. et Br.) vocanda.

346. Asterina Balansae Speg. — Fung. guar. pug. II, n. 130.

Hab. Ad folia viva coriacea *Myrtaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2476).

Obs. Mycelium epiphyllum araneoso-subpelliculosum atrum glabrum; perithecia scutato-dimidiata (60-100 μ dm.) subopace fuliginea margine vix fimbriatula; asci obovati v. ovati (35 × 20 μ) octospori aparaphysati; sporidia obovata (15-20 × 7-9 μ) medio 1-septata constricta, loculo supero ovato v. globoso (9-10 × 8-9 μ), infero obovato (10 × 7 μ), primo hyalina dein fuliginea.

347. Asterina colliculosa Speg. (n. sp.)

Diag. Mycelium arachnoideo-effusum vix perspicuum glabrum hyphis alterne ramosis, hyphopodiis subcylindraceis alternis ornatis; perithecia hemisphaerico-conoidea

dimidiata sparsa atra; asci obovati dense paraphysati; sporidia elliptica 1-septato-constricta, loculis subaequalibus fuliginea.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2709).

Obs. Mycelium tenuissimum fibrilloso-reticulatum non v. vix perspicuum maculosum v. effusum saepeque totum folium obtegens, ex hyphis flexuosulis matrici arcte adnatis irregulariter ramosis gracilibus (5-6 μ crs.) hyphopodiis parcis alternis cylindraceo-ramululiformibus (10 × 7 μ) integris laevibusque ornatis compositum; perithecia sparsa majuscula (200-250 μ dm.) in vivo conoidea in sicco subcollabescentia coriacella atra, contextu imperspicuo, apice stellatim rimosa, margine vix fimbriata; asci obovati (67-70 × 30-40 μ) antice late obtuseque rotundati crasseque tunicati, postice attenuati crasse brevissimeque pedicellati, paraphysibus densis crassis mucosis chlorinis (ut strato proligero) apice coalescentibus olivaceisque obvallati; sporidia conglobata elliptica (28-30 × 14-15 μ) medio 1-septata atque constricta loculis subaequalibus (sup. 14-15 × 14 μ — inf. 14 × 12 μ) primo hyalina dein fuliginea.

348. Asterina coriacella Speg. (n. sp.)

Diag. Mycelium epiphyllum crustaceo-maculosum, hyphis alterne ramosis, hyphopodiis lobato-cristatis alternis donatis compositum; perithecia coriacella margine non fimbriata minuta; asci globosi aparaphysati; sporidia elliptico-obovata, 1-septato-constricta, loculis subaequalibus fuliginea.

Hab. Ad folia viva *Cestri* speciei cujusdam in nemorosis prope *Apiahy*, Maj. 1888 (sub n. 2836).

Obs. Mycelium crustaceum plagulas sparsas epiphyllas orbiculares (2-5''' dm.) indeterminatas atras glabras opacas, centro per aetatem praecipue frustulatim evanescentes

efficiens, ex hyphis densissime constipatis medio saepius flexuosis gracilibus (6 μ crs.) fuligineis opacis alterne v. opposite ramosis, hyphopodiis oppositis v. alternis obovatis rectis v. subuncinato curvatis, saepius 3-4-lobato-cristatis ornatis efformatum; perithecia in centro macularum laxe aggregata, scutato-dimidiata (100-180 μ dm.) opaca glabra coriacella atra, contextu indistincto, per aetatem strictissime e centro ad marginem usque stellatim rimosa, margine subpellucida, fibris apice bilobis, non fimbriata; asci obovato-subglobosi (40 × 35-38 μ) apice crassiuscule tunicati sessiles octospori aparaphysati; sporidia conglobata obovata (20-24 × 8-10 μ) utrinque obtusa, medio 1-septata constrictula, loculis subaequalibus (sup. 10 × 9 μ — inf. 10-12 × 8-8,5 μ) primo hyalina dein obscure fuliginea.

349. Asterina cylindrotheca Speg. (n. sp.)

Diag. Mycelium maculosum v. arachnoideo-effusum subimperspicuum, hyphopodiis destitutum; perithecia sparsa v. laxe aggregata minuta; asci cylindracei pseudo-paraphysati; sporidia obovata, 1-septata, loculo supero leniter breviore, diu hyalina dein olivascentia.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1889 (sub n. 1550).

Obs. Mycelium quandoque subpelliculoso-maculosum (1-5''' dm.) quandoque arachnoideo-effusum subimperspicuum atrum glabrum ex hyphis laxe v. dense aggregatis flexuosulis gracilibus (5-6 μ crs.) fuligineis, hyphopodiis destitutis, parce irregulariterque ramulosis efformatum; perithecia sparsa v. laxe hinc inde aggregata scutato-dimidiata (120-180 μ dm.) centro opaca ac minute stellatim rimosa, ambitu pellucida parcissime fimbriato-appendiculata, contextu prosenchymatico-radiante fuligineo; asci cylindracei (50-80 × 18-20 μ) apice obtuse rotundati crassiuscule tunicati, basi abrupte coarctati atque in pedicello

brevi crassiusculoque producti dense pseudoparaphysati; sporidia recte disticha obovata (14-16 × 7 μ) utrinque obtusiuscula medio 1-septata non v. leniter constrictula, loculo supero globoso-ovato (6-7 × 7 μ) infero subconoideo (7-10 × 5-6 μ) diu hyalina, per aetatem chlorino-fumosa.

350. Asterina dispar Speg. — Fung. guar. pug. II, n. 125.

Hab. Ad folia viva *Styracis parvifoliae* in dumetis prope *Itabirá do Campo* secus *Rio das Velhas*, Sept. 1887 (leg. Cl. I. Arechavaleta).

Obs. Plagulae myceliales nubiloso-arachnoideae subimperspicuae epiphyllae; hyphopodia quandoque hemisphaerico-subcylindracea (10×6 μ) quandoque subconoidea apice abrupte obtuseque curvulo-subuncinata (15 × 5 μ); perithecia margine vix fimbriata, fimbriis apice profunde bilobis; asci e globoso obovati (50-60 × 38-42 μ) octospori aparaphysati; sporidia obovata (28-30 × 15-16 μ) excentrice 1-septata constrictula, loculo supero majore (sup. 18 × 15-16 μ — inf. 12 × 12-13 μ) fuliginea.

351. Asterina leptotheca Speg. (n. sp.)

Diag. Mycelium parcissimum evanescens subimperspicuum ex hyphis laxissimis hyphopodiis cylindraceo-ampulluliformibus alternis ornatis compositum; perithecia majuscula ostiolata fimbriata; asci cylindracei aparaphysati; sporidia clavulata utrinque acutiuscula, loculo supero subgloboso infero acutissimo fuliginea.

Hab. Ad folia viva *Hireae* speciei cujusdam in nemorosis prope *Apiahy*, Apr. 1881 (sub n. 1632).

Obs. Mycelium epiphyllum primo fibrilloso-reticulatum parcissimum (vix sub lente valida perspicuum) dein evanescens, ex hyphis flexuosulis repentibus (6-7 μ crs.) opace fuligineis irregulariter alterne v. opposite ramosis, hyphopodiis divaricatulis alternis e cylindraceo subampulluli-

formibus (18–20 × 6 μ) obtusis ornatis, compositum ; perithecia laxe aggregata numerosa superficialia orbicularia (250–300 μ dm.) dimidiato-scutata, atra subcarbonacea opaca, contextu indistincto vix margine pellucida ac dense minuteque fimbriatula, ostiolo rotundo latiusculo (30 μ dm.) pertusa ; asci cylindracei (80 × 10-12 μ) apice obtuse rotundati crasseque tunicati, base abrupte cuneati breviter crasseque pedicellati, paraphysati (an semper ?) octospori; sporidia recte v. suboblique monosticha clavulata (15–16 × 7-8 μ) medio 1-septata constricta, loculo supero globoso-ovato acute obtusato (6–7 × 8 μ), infero conoideo acutissimo (8–9 × 9 μ) eguttulato, primo hyalina dein pallide fumoso-olivacea. Species inter *Asterinam* et *Seynesiam*, ob subiculi evanescentiam, vere intermedia.

352. Asterina melastomatis Lév. — Sacc., Syll. pyr. I, f. 51.

Hab. Ad folia viva *Melastomaceae* cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2756).

Obs. Mycelium maculosum epiphyllum laxe fibrilloso-reticulatum vix perspicuum, ex hyphis alterne ramosis gracilibus (6-7 μ crs.) hyphopodiis alternis sparsis cylindraceo-hemisphaericis (8-10 × 6 μ) sessilibus donatis efformatum; perithecia laxe gregaria dimidiato-scutata (120–150 μ dm.) stellatim rimosa, centro opaca margine pellucida fimbriata, atra laevia ; asci obovati (40 × 24-30 μ) apice obtuse rotundati crasseque tunicati octospori aparaphysati v. pseudoparaphysibus per aetatem fuscescentibus immixti; sporidia conglobata obovata (16-20 × 8–10 μ) utrinque obtusa medio 1-septata constrictula, loculis aequilongis, infero vix graciliore, primo hyalina dein fuliginea.

353. Asterina nodulosa Speg. (n. sp.)

Diag. Mycelium nubiloso-maculosum ex hyphis gracilibus, hyphopodiis destitutis, hinc inde noduloso-inflatis effor-

matum; perithecia scutata opaca fimbriata; asci obovati aparaphysati; sporidia elliptico-obovata, loculis subaequalibus, fuliginea.

Hab. Ad folia viva *Tabebuiae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1585).

Obs. Mycelium plagulas orbiculares (2–5''' dm.) laxissime fibrilloso-reticulatas radiantes, fere vix sub lente perspicuas, efficiens, ex hyphis rectiusculis gracilibus (5-6 μ crs.) laxe alterne ramosis hinc inde elliptice noduloso-inflatis, nodulis (14-15 × 10-12 μ) grosse 1-guttulatis, fuligineis subopacis hyphopodiis destitutis efformatum; perithecia in plagulis laxe aggregata dimidiato-scutata (150-200 μ dm.) stellatim rimosa coriacella, contextu ambitu tantum pellucido ac perspicuo prosenchymatico-radiante vix septulato donata, margine fibrilloso-appendiculata; asci obovati (40-50 × 30-40 μ) antice obtusissime rotundati crasseque tunicati base abrupte crasse breveque pedicellati, 2-8-spori, aparaphysati; sporidia elliptica v. subobovata (32–34 × 16–18 μ), utrinque obtusa 1-septata non v. vix constricta, loculo supero vix majore (sup. 14-15 × 16-18 μ — inf. 14 × 14-16 μ), primo hyalina dein fuliginea.

354. Asterina obtusispora Speg. (n. sp.)

Diag. Mycelium arachnoideo-nubilosum subimperspicuum ex hyphis alterne ramosis, hyphopodiis alternis vix hemisphaericis instructis compositum; perithecia minuta coriacella; asci globoso-pyriformes aparaphysati; sporidia obovata utrinque obtusissima, loculo supero crassiore brevioreque, fuliginea.

Hab. Ad folia viva coriacea plantae cujusdam ignotae in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2728).

Obs. Mycelium epiphyllum parcissimum, fere sub lente tantum perspicuum, fibrilloso-reticulatum, ex hyphis gracilibus (5 μ crs.) laxe alterneque ramulosis fuligineis su-

bopacis, hyphopodiis alternis vix hemisphaerico-prominulis ornatis efformatum; perithecia in plagulis mycelialibus laxe gregaria scutato-dimidiata (100-120 μ dm.) stellatim rimosa, centro opaca, ambitu prosenchymatico-radiantia, margine breviter densiusculeque subrepando-fimbriatula atra; asci e sphaeroideo obovati (45 × 40 μ) apice crassiuscule tunicati, basi abrupte brevissimeque pedicellati aparaphysati octospori; sporidia obovata (22-24 × 14 μ) utrinque obtusa 1-septata non v. vix constrictula, loculo supero subhemisphaerico (10-12 × 14 μ), infero conoideo (12-14 × 10-12 μ), diu hyalina dein fuliginea.

355. Asterina peraffinis Speg. (n. sp.)

Diag. Mycelium maculoso-effusum subcrustaceum ex hyphis alterne ramosis, hyphopodiis subsessilibus alternis 2-4-lobato-cristatis efformatum; perithecia pusilla vix fimbriata; asci obovati aparaphysati; sporidia elliptica v. subcylindraceo-obovata, loculo supero longiore, fuliginea.

Hab. Ad folia viva *Asclepiadeae* cujusdam in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2861).

Obs. Mycelium atrum epiphyllum rarius amphigenum, plagulas parvulas (0,5-1''' dm.) dense constipatas saepe confluentes subcrustaceas tenues efficiens ex hyphis gracillimis (4-5 μ crs.) dense intertextis flexuosulis alterne ramosis, hyphopodiis alternis hemisphaericis v. uncinato-obovatis saepius trilobis, lobis saepius obtuse bidentatis v. emarginatis, ornatis compositum; perithecia in plagulis sparsa v. laxe aggregata dimidiato-scutata (80-100 μ) 10-12-laciniato-dehiscentia membranacea subopaca, contextu prosenchymatico-radiante fuligineo, ambitu subintegra parcissime fimbriato-appendiculata; asci obovati v. pyriformes (30 × 25 μ) apice late obtusissimeque rotundati, base brevissime crasseque pedicellati octospori aparaphy-

sati; sporidia conglobata e cylindraceo v. ellipsoideo obovata (18-20 × 9-10 μ), utrinque obtusiuscula 1-septata constrictula, supero longiore (10-12 × 8-10 μ) infero breviore (8 × 6–7 μ), primo hyalina dein fuliginea. Species sequenti peraffinis, satis tamen distincta.

356. Asterina pseudopelliculosa Speg. (n. sp.)

Diag. Mycelium tenuissime pelliculosum latissime effusum ex hyphis alterne ramosis, hyphopodiis hemisphaerico-cristatis subsessilibus alternis ornatis efformatum; perithecia pusilla membranaceo-pellucida; asci pyriformes aparaphysati; sporidia elliptico-obovata, fuliginea.

Hab. Ad folia viva *Ipomeae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2848).

Obs. Mycelium tenuissime pelliculosum atrum totum epi- (rarius etiam hypo-) phyllum obtegens, ex hyphis gracillimis (4-5 μ crs.) dense irregulariterque ramuloso-intertextis, hyphopodiis subsessilibus v. sessilibus e globoso hemisphaericis crenulato-subcristatis alternis v. suboppositis ornatis, pallide fuligineis compositum; perithecia hinc inde sparsa, stellatim 10–20-laciniato-dehiscentia subopace fuliginea dimidiato-scutata (80-120 μ dm.), contextu prosenchymatico-radiante, margine non v. vix repandula, atra glabra; asci obovato-pyriformes (35-40 × 30–35 μ) apice latissime obtuseque pedicellati aparaphysati octospori; sporidia conglobata ex elliptico subobovata (18 × 8 μ) 1-septata, constrictula, loculo supero subbreviore (8 × 8 μ) infero subgraciliore (10 × 7 μ), primo hyalina dein fuliginea. Species *Ast. pelliculosae* Brk. affinis, sed mox dignoscenda.

357. Asterina Puiggarii Speg. — Fung. guar. pug. II, n. 124.

Hab. Vulgatissima ad folia viva *Zanthoxyli*, *Trichiliae* nec

non *Myrtacearum Melastomacearumque* prope *Apiahy*, per ann. 1881–88 (sub n. 1550–2352-2710-2756).

Obs. Species distinctissima; mycelio saepius parcissimo, hyphopodiorum defectu, peritheciorum fabrica, ascis subcylindraceis sporidiisque clavulatis mox dignoscenda. Hyphae cylindraceae densiusculae flexuosulae septulatae fuligineae hyphopodiis destitutae; perithecia in juventute membranacea pellucida prosenchymatico-radiantia, per aetatem coriacea centro saepius *dense reticulatimque pellucido-rimulosa* ambitu pellucida saepius repando-denticulata (250–400 μ dm.); asci crasse cylindracei v. leniter clavulati, rarius subovati (75-100 × 30-40 μ) aparaphysati v. paraphysibus parcis filiformibus immixti; sporidia 2–3-sticha clavulata (25-32 × 10-15 μ) 1-septata, valide constricta, loculo supero e globoso ovoideo (12-16 × 12-14 μ) obtuse acutato granuloso-farcto, infero conoideo (12-16 × 8–10 μ), recta v. vix inaequilateralia, diu hyalina, per aetatem tamen fuliginea.

358. Asterina stellata Speg. (n. sp.)

Diag. Mycelium arachnoideo-subpelliculosum atrum maculosum v. late effusum ex hyphis alterne v. opposite ramosis, hyphopodiis ovoideis sessilibus alternis ornatis compositum; perithecia pusilla membranacea margine stellato-lobata; asci e globoso obovati aparaphysati; sporidia elliptica v. obovata utrinque obtusa, loculo supero conspicue minore, fuliginea.

Hab. Ad folia viva *Compositae* herbaceae cujusdam in dumetis prope *Apiahy*, Apr. 1888 (sub n. 2763).

Obs. Mycelium plagulas arachnoideo-subpelliculosas orbiculares (1–5‴ dm.) epi- (rarius hypo-) phyllas, dense gregarias saepe confluentes ac totum folium obtegentes atras efficiens ex hyphis gracilibus (5-6 μ crs.) rectiusculis alterne v. opposite ramosis, hyphopodiis obovatis (10×6 μ) alternis integris sessilibus v. subsessilibus ornatis apice fuligineis

compositum; perithecia in plagulis sparsas v. laxe aggregata, dimidiato-scutata (100–120 μ dm.) ambitu majuscule parceque stellatim lobato-dentata, tenui membranacea, pellucida, contextu grosse prosenchymatico-radiante, cellulis flexuosis (10–20 × 4-5 μ) fuligineis composito donata, rimose stellato-dehiscentia atra glabra; asci pyriformes (50-60 × 25-30 μ) antice obtuse rotundati crasseque tunicati postice subcuneati ac pedicello brevissimo crassoque suffulti, octospori aparaphysati; sporidia conglobata elliptica v. obovata (29–30 × 15 μ) utrinque obtusa rotundata, 1-septata, in juventute non constricta, per aetatem valide constricta fuliginea, loculo supero depresso (10-12 × 13–15 μ), infero obovato (18 × 15 μ).

359. Asterina sylvatica Speg. (n. sp.)

Diag. Mycelium maculosum arachnoideo-subpelliculosum ex hyphis alterne ramosis hyphopodiis hemisphaericis alternis ornatis compositum; perithecia minuta coriacella fimbriatula; asci obovati aparaphysati; sporidia elliptica 1-septata, loculis aequilongis, fuliginea.

Hab. Ad folia viva *Trichiliae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1702).

Obs. Mycelium plagulas epiphyllas orbiculares (2-4''' dm.) saepe confluentes, arachnoideo-nubilosas, non v. vix tenuissime subcrustaceo-pelliculosas atras efficiens, ex hyphis flexuosulis irregulariter ramulosis densiuscule intertextis gracilibus (5-6 μ crs.) hyphopodiis hemisphaericis (rarius ovoideis) integris (5 × 6 μ) alternis ornatis fuligineis compositum; perithecia dimidiato-scutata (120–150 μ dm.) glabra astoma minute stellatim rimosa, coriacella opaca, vix ambitu pellucida ac fibroso-radiata, margine parce crasseque appendiculato-fimbriata; asci obovati (40–55 × 25–30 μ) antice obtusissimi ac crasse tunicati, postice non v. vix pedicellati octospori aparaphysati; sporidia conglobata elliptica non v. vix subclavulata

(20-24 × 8-10 μ) medio 1-septata constricta, utrinque obtusa, loculis (sup. 10-12 × 9-10 μ — inf. 10-12 × 8-9) aequalibus, primo hyalina dein fuliginea.

360. SEYNESIA? MEGALOTHECIA Speg. (n. sp.)

Diag. Perithecia maxima, superficialia membranacea atra; asci globoso-ovati aparaphysati; sporidia obovata didyma fuliginea.

Hab. Ad folia viva *Sebastianiae* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1625).

Obs. Perithecia epiphylla sparsa scutato-dimidiata orbicularia (1-1,5''' dm.) vix convexula, centro per aetatem irregulariter stellatim dehiscentia, margine repandulo-crenata sed non fimbriata, mycelio destituta, membranaceo-coriacella, vix ambitu pellucida, contextu prosenchymatico-radiante rectiusculo continuo dense guttulato olivaceo; asci e sphaeroideo subobovati (50-60 × 45-50 μ) tunica ubique tenui vestiti vix papillulato-pedicellati, octospori aparaphysati; sporidia obovata (30 × 16 μ) medio 1-septata constrictula, loculo supero e globoso ovato (12 × 16 μ) infero obovato-conoideo (16-18 × 12 μ) primo hyalina dein fuliginea. Species pulchella mox dignoscenda, saepius a *Dimerosporio asterinarum* Speg. obliterata.

361. SEYNESIA OLIVASCENS Speg. (n. sp.)

Diag. Perithecia pusilla neurophila atra; asci clavulati aparaphysati; sporidia obovata, loculo infero minutissimo, olivacea.

Hab. Ad folia viva *Myrtaceae* y *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, Hiem. 1880 (sub n. 1550).

Obs. Perithecia epiphylla nervulis insidentia, maculas fuscescentes dendritico-ramulosas reticulatas (2-10''' dm.) efficientia, innata? superficialia, mycelio destituta, dimidiato-scutata (80-90 μ dm.) centro stellatim rimosa, coriacella atra opaca, ambitu pellucido-olivacea, margine

integra, glabra; asci clavulati (30 × 12 μ) antice obtusi crasseque tunicati octospori aparaphysati; sporidia conglobata e cylindraceo obovata (10–11 × 4 μ) utrinque obtuse rotundata, excentrice 1-septata, non v. vix constrictula, loculo supero quam infero triplo v. quadruplo longiore, olivacea.

362. Seynesia pachysperma Speg. (n. sp.)

Diag. Maculigena; perithecia laxe gregaria, coriacella; asci globosi aparaphysati; sporidia majuscula obovata subexcentrice 1-septata fuliginea.

Hab. Ad folia coriacea viva plantae ignotae in sylvis prope *Apiahy*, Ant. 1880 (sub n. 1624).

Obs. Maculae epiphyllae irregulariter suborbiculares (3–6''' dm.) olivascentes, submucedineo-furfuraceae (an thallus vetustus?) subdeterminatae; perithecia in maculis sparsa v. laxe gregaria, dimidiato-scutata (150–200 μ dm.) centro irregulariter v. stellatim dehiscentia, margine integra non fimbriata, coriacella, contextu opaco indistincto, atra glabra; asci globosi v. subobovati (55–65 × 40–60 μ) antice obtusissimi vix incrassato-tunicati, postice brevissime crasseque pedicellati, octospori aparaphysati, tunica primo hyalina dein fuscescente vestiti; sporidia conglobata obovata (32–42 × 18–20 μ) utrinque obtusa, subexcentrice 1-septata modiceque constrictula, loculo supero majore crassioreque (17-22 × 18-20 μ), infero breviore gracilioreque (15-20 × 14 μ), diu hyalina dein fuliginea.

363. Seynesia variolosa Speg. (n. sp.)

Diag. Perithecia epiphylla subcircinata plaglulas minutas orbiculares dense variolose sparsas subcrustaceas efficientia, minuta coriacella atra; asci e globoso-cylindracei aparaphysati; sporidia obovata, loculo infero minore, fuliginea.

Hab. Ad folia viva *Myrtaceae* cujusdam in sylvis prope *Apiahy,* Dec. 1882 (sub n. 2925).

Obs. Perithecia epiphylla irregulariter v. subcircinatim dense constipata plagulas minutas (0,5–2''' dm.) atras granulosas, centro saepe deficientes, sparsas v. saepius hinc inde dense varioloso-aggregatas efformantia, minuta (120–150 μ dm.) dimidiato-scutata atra glabra laevia, centro stellatim dehiscentia, coriacella vix margine strictissime pellucido-prosenchymatica, subcrenatula, crenaturis (v. apice fibrarum) integris; asci in juventute sphaeroideo-pyriformes (28-30 × 18-20 μ), per aetatem subcylindracei v. subclavulati (35-40 × 12-15 μ) octospori aparaphysati; sporidia conglobata v. disticha ellipsoideo-obovata (12- × 5-6 μ) excentrice 1-septata subconstrictula, loculo supero majore subovato-globoso (7-8 × 6 μ), infero e cylindraceo obtusissime subconoideo (4-5 × 4-5 μ), primo hyalina dein pallide fuliginea. Subiculum omnino deficiens.

Trichopeltis Speg. (n. gen.)

Char. Mycelium e fibris pro ratione majusculis membranaceo-applanatis vittaeformibus non costatis dendritico-ramulosis prosenchymatico-contextis efformatum; perithecia superficialia v. fibris tecta dimidiato-scutata parvula ostiolata; asci octospori; sporidia 2-septata hyalina.

Genus nobilissimum, cujus typus *Trichopeltis reptans* (B. et C.) Speg. (Cub. Fung. n. 734 sub *Asterina*) est.

364. Trichopeltis pulchella Speg. (n. sp.)

Diag. Vittae mycelii membranaceo-pellucidae prosenchymaticae olivaceae laxe ramoso-intricatae longiusculae atque latiusculae; perithecia pusilla ostiolo rotundo perforata; asci obovati aparaphysati; sporidia elliptico-obovata minuta 2-septata hyalina.

Hab. Ad folia viva *Myrtacearum* in dumetis prope *Apiahy,* Hiem. 1888 (sub n. 2364-65).

Obs. Vittae v. taeniolae myceliales e puncto centrali oriundae stellatim v. irregulariter effusae parce flexuosae longiusculae atque latiusculae (2–12‴ lg. × 80-100 μ dm.) tenuissime membranaceae, parcissime ramulosae, rarius subcrustaceo-intricatae, utrinque subattenuatae, fusco-olivaceae, matrici arcte adnatae, prosenchymaticae, contextu e centro taeniolae (non costato-incrassato) marginem versus arcuato-expanso v. rectiusculo septulato, cellulis saepius 1-guttulatis, donatae; perithecia matrici adnata vittis tecta eisque superne adnata, scutato-dimidiata (70-90 μ dm.) membranacea, contextu prosenchymatico-radiante olivaceo, vix convexula margine integerrima ostiolo minuto rotundo (10 μ dm.) perforata, atra glabra; asci obovati v. elliptico-ovati (25 × 14 μ) apice umbonato-obtusati crassiuscule tunicati base cuneati ac pedicello breviusculo suffulti octospori aparaphysati; sporidia conglobata elliptico-subclavulata (10-12 × 3 μ) utrinque obtusiuscula, 2-septata non constricta, loculis extimis majoribus, recta v. leniter curvula, hyalina. Species *Asterinae labeculae* Mntgn. affinis videtur sed specimina ad comparandum mihi desunt et descriptio nimis manca!

365. Micropeltis albo-marginata Speg. (n. sp.)

Diag. Perithecia dimidiato-scutata sparsa majuscula coriacea atra; asci fusoideo-cylindracei aparaphysati; sporidia fusoideo clavulata, 3-4-septata hyalina.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in nemorosis prope *Apiahy*, Hiem. 1880 (sub n. 1443).

Obs. Perithecia epiphylla v. laxe gregaria, subiculo omnino destituta, dimidiato-scutata (300-400 μ dm.) in vivo subhemisphaerica in sicco collabescentia medio papillulata glabra laevia atra opaca subcarbonacea, contextu atro-opaca, minute denseque pellucide (rimuloso?) reticulata, margine integerrima zona strictiuscula (20-50 μ lt.) hyalina anhysta cincta, medio ostiolo rotundo minutissimo

perforata; asci e cylindraceo fusoidei (65-70 × 15 μ) apice subtruncato-rotundati crassiusculeque tunicati, deorsum attenuato-cuneati in pedicello brevissimo crassoque producti octospori aparaphysati; sporidia fusoideo-clavulata (18-20 × 4 μ) superne obtusiuscula inferne acutiuscula, recta v. vix lenissime inaequilateralia, 3 v. 4 (an 5?)-septata, non constricta hyalina. Species *M. applanatae* Mntgn. peraffinis, peritheciis majoribus tamen sporidiisque minoribus recedens.

366. Micropeltis? membranacea Speg. (n. sp.)

Diag. Perithecia dimidiato-scutata minuta margine longe fimbriata, aggregato-confluentia, crustam tenuissime membranaceam atram efficientia; asci ovati aparaphysati; sporidia clavulata, 4-pseudoseptata hyalina.

Hab. Ad folia subcoriacea plantae cujusdam ignotae in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1554).

Obs. Perithecia atra glabra laevia dimidiato-scutata orbicularia (80-90 μ dm.) vix convexula, centro minute stellatim dehiscentia membranacea, contextu prosenchymatico-radiante rectiusculo olivaceo donata, margine longe denseque fimbriata, densissime constipata atque fimbriis inter se intertextis juncta, pelliculam subopacam atram late matricem obtegentem facillimeque ab ea secedentem efformantia; asci ovati (35-40 × 20-22 μ) apice subtruncato-rotundati crassiusculeque tunicati, base rotundato-cuneati atque pedicello brevissimo suffulti octospori aparaphysati; sporidia conglobata clavulata (16 × 5 μ) superne obtuse, inferne acutiuscule rotundata, 4-pseudoseptata non constricta, loculo supero majore, caeteris gradatim minoribus, hyalina. Jodi ope nulla!

367. Micropeltis subapplanata Speg. (n. sp.)

Diag. Perithecia sparsa dimidiata-scutato minuta coriacella;

asci ovati 5-8-spori aparaphysati; sporidia fusoideo-cylindracea 3-7-septulata hyalina.

Hab. Ad folia viva *Solanaceae* cujusdam prope *Nicaragua* (leg. cl. Wright).

Obs. Perithecia epiphylla sparsa dimidiato-scutata orbicularia (120-160 μ dm.) e centro minute irregulariterque stellatim rimosa, margine integra atra glabra opaca coriacella, contextu indistincto (anhisto?) vix ambitu pellucido pallidius reticulato-punctulato donata, subiculo omnino destituta; asci ovati (50 × 30 μ) antice umbonati obtusissime rotundati, postice rotundati pedicello brevissimo crassoque suffulti; sporidia conglobata e cylindraceo fusoidea (20-32 × 4-5 μ) recta v. leniter curvula utrinque obtusiuscula 3-7-septata, non constricta hyalina. Species *M. applanatae* Mntgn. peraffinis, sed sporidiis 5-7-septatis ascisque ovoideis tamen satis recedens.

368. *Scutellum paradoxum* Speg. — Sacc., Syll. pyr. V. II, f. 668.

Hab. Ad folia viva coriacea plantae ignotae cujusdam in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1060-2382).

Obs. Specimina nonnulla a typo peritheciis subastomis atque sporidiis subminoribus (18 × 5-6 μ) fuligineis vix deflectunt.

SCOLECOPELTIS Speg. (n. gen.)

Char. Perithecia dimidiato-scutata superficialia, subiculo destituta atra; asci octospori; sporidia filiformia ascorum longitudine, in articulis secedentia, hyalina.

369. Scolecopeltis tropicalis Speg. (n. sp.)

Diag. Perithecia majuscula atra coriacea glabra subiculo destituta ostiolata superficialia; asci cylindracei v. subfusoidei octospori aparaphysati; sporidia cylindraceo-filiformia in articulis secedentia hyalina.

Hab. Ad epicarpium nec non folia viva *Citri aurantii* in hortis prope *Apiahy*, Aest. 1888 (sub n. 2338 et sine n.)

Obs. Perithecia sparsa mycelio omnino destituta scutato-orbicularia (0,5–1''' dm.) facillime a matrice secedentia, centro ostiolo rotundo (10–20 μ dm.) perforata, margine integra, atra glabra opaca, contextu indistincto atro vix ambitu pellucido ac pallidius dense minuteque venuloso-(rimuloso?) reticulato; asci cylindracei v. subfusoidei (130–180 × 16-20 μ) apice subtruncato-rotundati, deorsum attenuato-cuneati, brevissime crasseque pedicellati, ubique crassiuscule tunicati, octospori aparaphysati; sporidia ascorum longitudine cylindracea utrinque attenuata atque acutiuscula, primo dense septulata, dein in articulis cylindraceis utrinque rotundatis (5–15 × 4–5 μ) dilabentia hyalina.

370. Saccardinula coriacea Speg. (n. sp.)

Diag. Perithecia coriacella minuta atra, subiculo destituta; asci elliptici v. ovoidei; sporidia obovata horizontaliter 3-septata, septo altero verticali divisa, hyalina.

Hab. Ad folia viva coriacea plantae cujusdam ignotae in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2580).

Obs. Perithecia epiphylla sparsa v. hinc inde 3–5–aggregata, macula minuta (1–3''' dm.) purpurascenti-fusca indeterminata insidentia, scutato-dimidiata orbicularia (250-300 μ dm.) astoma, margine integra, coriacella contextu indistincto, vix ambitu fumoso-pellucido donata; asci elliptici v. elliptico-ovoidei (45 × 22 μ) apice crassissime tunicati obtuseque umbonato-rotundati, base rotundato-subcuneati in stipite brevissimo crassiusculo producti, substantia granulosa (an pseudoparaphysibus?) hyalina immersi; sporidia conglobata obovata (18-24 × 9–12 μ) utrinque obtusiuscula horizontaliter 3-septata, ad medium tantum constrictula, loculis 1 v. 2 internis (rarius extimis) septo altero verticali divisis, hyalina.

HEMYSTERIACEAE Speg.

371. Lembosia ampulluligera Speg. — Fung. guar. pug. I, n. 303 (sub *Morenoella*).

Hab. Ad folia viva *Laurineae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2852).

Obs. Specimina brasiliensia vix a typo recedunt hyphopodiis longioribus (15 × 5 μ) sporidiisque conspicue majoribus (18–20 × 8 μ), loculo supero globoso-ovato (8 × 8 μ) infero conoideo-obovato (10 × 7 μ) fuligineis. Hyphopodia densissima semper opposita eximie ampulluliformia.

372. Lembosia melastomatum Mntgn. — Sacc., l. c. f. 742.

Hab. Ad folia viva *Melastomacearum* in nemorosis prope *Apiahy*, Aest. 1888 (sub n. 2756–2924).

Obs. Mycelium epiphyllum plagulas orbiculares (1–5''' dm.) laxe fibrilloso-radiantes atras efficiens ex hyphis rectiusculis gracilibus (6 μ crass.) alterne ramosis fuligineo-pellucidis septulatis, hyphopodiis alternis sparsis sessilibus hemisphaerico-ovatis (7–8 μ crs.) laxe ornatis compositum; perithecia dimidiato-scutata in mycelii centro laxe aggregata breviter elliptica (200-400 μ lg. × 80-100 μ lt.) utrinque obtuse rotundata coriacella, rimula acutiuscula longitudinali dehiscentia opaca, ambitu pellucida dense fimbriatula, fimbriis apice simplicibus (5 μ crs.) breviusculis; asci pyriformes (50–65 × 30-45 μ) antice obtusissimi crasse tunicati postice brevissime crasseque pedicellati octospori, aparaphysati; sporidia conglobata elliptica v. ovata (26-30 × 12-14 μ) utrinque obtusiuscula medio 1-septato-constrictula, loculo supero non v. vix longiore crassioreque (sup. 14–16 × 12-14 μ — inf. 12-14 × 11 μ) fuliginea.

373. Lembosia? microscopica Speg. (n. sp.)

Diag. Maculae determinatae albo-pallescentes; perithecia sparsa hypophylla linearia atra subiculo omnino destituta; asci ovati v. pyriformes aparaphysati; sporidia obovata olivascentia.

Hab. Ad folia languida *Eugeniae* speciei cujusdam in sylvis prope *Apiahy*, Maj. 1888 (sub n. 2605).

Obs. Maculae amphigenae irregulariter suborbiculares (3-10''' dm.) repandae pallescentes determinatae linea fuscescenti-testacea strictissima cinctae; perithecia dimidiato-scutata in maculis hypophylla sparsa superficialia minutissima (oculo nudo fere imperspicua) linearia (250-1500 × 50-70 μ) recta v. flexuosula utrinque acutiuscule obtusata, rimula latiuscule hiante longitudinali dehiscentia, atra glabra opaca tenui membranacea, contextu prosenchymatico-radiante rectiusculo septulato, margine integra v. vix undulata; asci pyriformes ovati (15-16 × 7-8 μ) antice plus minusve obtusati crasseque tunicati postice cuneati crasse pedicellati octospori aparaphysati; sporidia elliptico-obovata (6-7 × 2 μ) superne obtuse inferne acute rotundata, primo 4-guttulata, dein medio 1-septata non constricta, loculis aequilongis, primo hyalina dein olivaceo-fuliginea. Species pulchella perpusilla difficillime invenienda, a genere subiculi defectu satis deflectens.

374. Lembosia myrtacearum Speg. (n. sp.)

Diag. Mycelium pelliculoso-maculosum atrum ex hyphis flexuosulis saepius opposite ramosis, hyphopodiis ampulluliformibus alternis ornatis compositum; perithecia elliptica non v. vix fimbriatula; asci clavato-pyriformes aparaphysati; sporidia clavulata fuliginea.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in nemorosis prope *Apiahy*, Aest. 1881 (sub n. 1699).

Obs. Mycelium epiphyllum plagulas orbiculares (3-5''' dm.) submembranaceas ambitu nubiloso-evanescentes arctiu-

scule matrici adnatas efficiens, ex hyphis flexuosulis subgracilibus (5–7 μ crs.) saepius opposito-ramosis, hyphopodiis alternis divaricatis ampulluliformibus (12 × 4 μ) obtusis ornatis fuligineo-opacis compositum; perithecia dimidiato-scutata in subiculo laxe aggregata elliptico-linearia (300-600 μ lg. × 120-150 μ lt.) recta v. subflexuosula utrinque obtusa coriacella, contextu prosenchymatico-radiante fuligineo subflexuosulo vix ambitu pellucide perspicuo donata, longitudinaliter rimose dehiscentia, margine integra parcissime appendiculato-fimbriata atra glabra opaca; asci obclavulati v. pyriformes (30-40 × 18-20 μ) antice subtruncato-rotundati postice cuneati breviter crasseque pedicellati octospori aparaphysati; sporidia conglobata elliptico-clavulata (18-20 × 7-8 μ) 1-septata non v. vix constricta, loculo supero ovato subacutiusculo (7-8 × 8 μ) infero cylindraceo obtusissimo (10–12 × 6–7 μ) primo hyalina dein fuliginea. Species *L. ampulluligerae* Speg. valde affinis, sed recedit mycelio magis crustaceo, hyphopodiis subramululiformibus semper alternis laxis, loculo infero sporidiorum cylindraceo.

375. Lembosia? Puiggarii Speg. (n. sp.)

Diag. Mycelium vix maculoso-nubilosum ex hyphis irregulariter ramulosis hyphopodiis hemisphaericis alternis donatis compositum; perithecia laxe gregaria elliptica non fimbriata; asci pyriformes aparaphysati; sporidia clavulata fuliginea.

Hab. Ad folia coriacea viva plantae cujusdam ignotae prope *Apiahy*, Aest. 1882 (sub n. 1578).

Obs. Mycelium epiphyllum plagulas atras nubilosas parum perspicuas irregulariter expansas (3–8‴ dm.) non pelliculosas efformans, ex hyphis gracilibus (5-6 μ crs.) flexuosulis densiuscule intertextis irregulariter ramulosis, hyphopodiis paucissimis alternis vix noduloso-hemisphaericis (8 μ crs.) integris ornatis, fuligineo-opacis compositum;

perithecia in plagulis laxe gregaria ex elliptico orbicularia (150-300 × 80-150 μ) subtrigona v. linearia utrinque obtusa, longitudinaliter rimose dehiscentia, margine integra parcissime fibrilloso-appendiculata coriacella opaca contextu prosenchymatico-radiante fuligineo-atro vix v. non perspicuo donata; asci pyriformes (30-40 × 20-35 μ) antice truncato-rotundati crasseque tunicati postice cuneati brevissime papillato-pedicellati octospori aparaphysati; sporidia conglobata subclavulata (24-28 × 8-9 μ) utrinque obtusiuscula recta v. vix curvula 1-septata leniter constricta loculo supero vix crassiore atque conspicue breviore (10 × 9 μ) infero longiore (14-16 × 7-8 μ) primo hyalina dein fuliginea (an per aetatem 3-septata?).

376. Hysterostomella circinata Speg. (n. sp.)

Diag. Stromata irregulariter suborbiculari-repanda crustacea atra ostiolis subcircinatis rimosis breviusculis exasperata; asci pyriformes aparaphysati; sporidia majuscula obovata 1-septata, loculo supero breviore, fuliginea.

Hab. Ad folia subcoriacea plantae cujusdam ignotae in sylvis prope *Apiahy*, Jul. 1881 (sub n. 1639).

Obs. Stromata epiphylla sparsa, rarius aggregata ac confluentia, irregulariter dimidiato-scutata suborbicularia (3-6''' dm.) margine repando-effusa tenuia crustacea superficialia matrici arcte adnata, planissima atra glabra laevia opaca, ostiolis saepius circinatis, rarius irregulariter dispositis, subcentralibus breviter linearibus prominulis, primo clausis dein latiuscule hiantibus (300-600 μ lg. × 120-180 μ lt.) grosse exasperata, contextu fere opaco atro-fuligineo prosenchymatico-radiante parce septulato donata; loculi vix rugula stromatica divisi lineari-flexuosi saepius hinc inde confluentes (500-1000 μ lg. × 150-250 μ lt.) quandoque subconcentrici quandoque irregulariter intricati, muco fuscescente farcti; asci pyriformes (60-70 × 40-50 μ) antice obtusissimi non v. vix subumbonati crasseque tu-

nicati, postice cuneati brevissime crasseque pedicellati octospori aparaphysati; sporidia conglobata obovata (34-40 × 16-20 μ) 1-septata non v. vix constricta loculo supero subsphaeroideo (14-15 × 18-20 μ) subpallidiore, infero cylindraceo-obovato (21-26 × 16-18 μ) obtusissimo obscuriore, primo hyalina dein subopace fuliginea. Species pulchella *H. guaraniticae* Speg. peraffinis sed bene distincta; primo intuitu facillime pro *Lembosia* quadam, ob ostiola prominula latiuscule aperta 1-v. 2-circinata, sumenda.

377. Hysterostomella? rhytismoides Speg. (n. sp.)

Diag. Stromata hypophylla irregulariter ellipsoideo-expansa majuscula tenuiter crustacea arcte adnata atra glabra, subimperspicue concentriceque rugulosa; loculi lineares concentrici gracillimi rimose dehiscentes; asci cylindracei aparaphysati; sporidia minuta elliptico-clavulata 1-septata hyalina (an semper?).

Hab. Ad folia viva *Lomariae imperialis* in nemorosis prope *Apiahy*, Oct. 1883 (sub n. 696 b.)

Obs. Maculae epiphyllae atro-fuscae irregulariter ellipsoideo-orbiculares (1-3''' dm.) indeterminatae rugis 1 v. 2 concentricis majusculis ornatae; stromata hypophylla saepius ellipsoidea (1-5''' lg. × 0,5-4''' lt.) sparsa v. hinc inde plus minusve gregaria saepeque confluentia dimidiato-scutata superficialia crustaceo-membranacea tenuissima subrigidula arcte matrici adnata atra glabra, oculo nudo laevia, sub lente dense concentriceque ostiolato-rugulosa ambitu integra, contextu pellucido dense subparenchymatico-radiante, cellulis subcuboideis (3-4 × 2-3,5 μ) muralibus composito, fuligineo-olivaceo, obsolete zonato, margine integerrimo majuscule regulariterque crenato; loculi dissepimentis tenuissimis separati gracillimi lineares (0,5-2''' lg. × 50-70 μ) concentrici extus vix rugiformi-manifesti, ostiolo rimoso longitudinali dehiscentes;

asci e cylindraceo leniter clavatí v. obclavati (42–50 × 10-12 μ) apice subtruncato-rotundati crassissimeque tunicati base abrupte crasse brevissimeque pedicellati, octospori aparaphysati; sporidia ellipsoideo-clavulata (11-12 × 3-5 μ) primo continua dein medio 1-septata, loculis subaequilongis, hyalina, an postremo olivacea? Species pulcherrima mox dignoscenda. Species perplurimae, generis *Rhytisma* auctorum, a me inspectae, sub hoc genere militant.

378. Schneepia ? Arechavaletae Speg. (n. sp.)

Diag. Stromata scutata majuscula dense radiatim sulcato-peritheciigera, peritheciis acute rimulosis, vix centro laevia v. subumbilicata atra opaca; asci elliptico-cylindracei, parce clavulato-paraphysati; sporidia obovata didyma hyalina.

Hab. Ad folia viva *Styracis parvifoliae* in dumetis prope *Itabirá do campo*, secus *Rio das Velhas*, Sept. 1887 (leg. Cl. J. Arechavaleta).

Obs. Stromata epiphylla sparsa v. laxe gregaria saepeque confluentia, eximie orbicularia (2-6‴ dm.) superficialia, matrici arctiuscule adnata, vix convexula, dense radiatim sulcato-rugosa, rugis acutiusculis rimosis, centro plus minusve applanata v. subumbilicata atra glabra laevia opaca subcarbonacea, contextu atro opaco indistincto; loculi (perithecia) lineares radiantes, ad marginem stromatis brevissime liberi rotundati, centrum versus attenuato-confluentes (1-2,5‴ lg. × 300-500 μ lt.) rima longitudinali, labiis acutiuscule conniventibus, dehiscentia; asci elliptici v. cylindraceo-obovati (50-60 × 15-20 μ) antice obtuse rotundati crassissimeque tunicati 1-foveolatique, postice rotundato-subcuneati brevissime crasseque stipitati, octospori, paraphysibus paucis nonnihil longioribus (80–90 × 2 μ) apice clavulato-incrassatulis (3-5 μ crs.) obtusis olivascentibusque obvallati; sporidia di-v. tri-sticha obo-

vata (16-18 × 7-8 μ) superne obtuse inferne acutiuscule acutata, 1-septata, non v. vix constricta, loculo supero ovoideo-subhemisphaerico subbreviore, infero conoideo acuto sublongiore, hyalina (an demun fuliginea?). Species nobilissima *S. guaraniticae* Speg. peraffinis, a qua tamen recedit peritheciis eximie prominulo-radiatis, ascis brevioribus, paraphysibus apice olivascentibus ac sporidiis nonnihil longioribus. Huc certe *Actidium Hänkei* F. Nees et facillime etiam *Parmularia Styracis* Lév. spectant.

HYSTERIACEAE Cda.

379. Rhytidhysterium brasiliense Speg. — Sacc., l. c. f. 759.
Hab. Ad ramos dejectos putrescentes in nemorosis prope *Iguapé*, 10 Oct. 1877 (sub n. 1444).

380. Rhytidhysterium viride Speg. — Sacc., l. c. f. 759.
Hab. Ad cortices adhuc viventes lichenibus tectas prope *Faxina*, Jun. 1880 (sub n. 1230).

381. Lophodermium maculare (Fr.) DNtrs. — Sacc., l. c. f. 791.
Hab. Ad folia coriacea dejecta putrescentia in sylvis prope *Apiahy*, Dec. 1882 (sub n. 2928).
Obs. Specimina brasiliensia nonnihil a typo recedunt, an nova species? Maculae indeterminatae amphigenae albo-pallescentes sparsae majusculae (5-15''' dm.); perithecia in centro macularum laxe aggregata ellipsoideo-linearia (0,5-1''' lg. × 150-250 μ lt.) utrinque acutiuscule rotundata erumpenti-innata, superne acutiuscula longitudinaliter rimosa, atra glabra opaca contextu indistincto; asci cy-

lindracei (90-100 × 5-6 μ) apice rotundati deorsum modice attenuato-pedicellati octospori, paraphysibus filiformibus apice rectis v. vix flexuosulis saepeque subramulosis obvallati; sporidia lineari-filiformia (70-80 × 1 μ) utrinque acutiuscula, dense subimperspicueque septulata hyalina.

DISCOMYCETEAE Fr.

382. Neolecta flavo-virescens Speg. — Fung. arg. pug. IV, n. 212.
Hab. In nemorosis uliginosis inter folia ramentaque coacervata, prope *Apiahy*, Jul. 1881 (sub n. 1544).

383. Peziza Balansae Speg. — Fung. guar. pug. I, n. 309.
Hab. Ad ramenta lignea putrescentia muscosa in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1659 et sine n.)
Obs. Specimina brasiliensia a typo omnibus partibus nonnihil majoribus vix deflectunt; cupulae 2-10''' dm.; pili 250-350 × 20-25 μ; asci in parte sporif. 120-150 × 15 μ, in ped. 70-80 × 5-10 μ; sporae ellipsoideae 18-22 × 14-15 μ non v. grosse 1-guttulatae. Species *P. umbrarum* Fuck. affinis, sed satis ab ea distincta.

384. Peziza apiahyna Speg. — Fung. arg. pug. IV, n. 221.
Hab. Ad cortices dejectos putrescentes in nemorosis prope *Apiahy*, Apr. 1881 (sub n. 998).

385. Peziza hematochlora Speg. — l. c. n. 216.
Hab. Ad ramos corticatos dejectos in nemorosis prope *Apiahy*, Aut. 1881 (sub n. 1555).

386. Peziza coriacella Speg. (n. sp.)

Diag. Ascomata discoideo-turbinata sessilia marginata integra, hypothecio glabro olivaceo, epithecio albo-pallescente; asci clavulati octospori paraphysati; sporidia fusoideo-navicularia utrinque acutiuscula hyalina.

Hab. In disco truncorum putrescentium in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2351).

Obs. Cupulae (1-3''' dm.) hinc inde dense aggregatae inferne leniter turbinato-convexae, puncto centrali adfixae, superne applanatae non v. vix concavae, marginatae integrae, in sicco hysteroideo-v. trigono-involutae, extus glabrae laeves olivaceae vix fibrilloso-rugulosae, epithecio subceraceo albo-pallescente laevissimo; asci e clavato fusoidei ($70 \times 7 \mu$) apice acutiuscule rotundati deorsum attenuati modice pedicellati octospori paraphysibus filiformibus parcis apice incrassato-capitulatis subcoalescentibusque obvallati; sporidia oblique monosticha fusoidea ($10\text{-}12 \times 3 \mu$) utrinque acutiuscula recta v. subnavicularia continua hyalina. Obturaculus ascorum punctiformis iodi ope coerulescens.

387. Pezicula guttiformis Speg. (n. sp.)

Diag. Ascomata gregaria v. sparsa lenticularia, epithecio coccineo, extus pallidiora non v. vix subpruinulosa; asci clavulati paraphysati; sporidia ellipsoidea hyalina.

Hab. Ad folia viva *Galii* speciei cujusdam prope *Apiahy*, Jun. 1888 (sub n. 2762-2905).

Obs. Cupulae amphigenae v. saepius epiphyllae, rarius caulogenae, sparsae v. hinc inde plus minusve dense gregariae, in vivo e globoso lenticulares (180-250 μ dm.), in sicco globuloso-contractae, ceraceo-molles, epithecio coccineo-subsuccineo glabro laevi, hypothecio pallescente non v. vix pruinuloso, contextu aurantio carnosulo indistincto; asci clavulati ($50 \times 8 \mu$) apice obtusiuscule rotundati postice cuneato-attenuati breviter crasseque stipitati paraphysibus filiformibus apice incrassatulis parcis

obvallati octospori; sporidia ellipsoidea (10 × 4 μ) recta v. leniter inaequilateralia utrinque obtusa oblique monosticha v. recte disticha hyalina. Iode ope nulla. Inter ascomata subiculum mucedineum tenuissimum heterogeneum (*aspergilli* cujusdam?) saepe adest!

388. Chlorosplenium Puiggarii Speg. — Fung. arg. pug. IV, n. 226.

Hab. Ad truncos ramosque decorticatos putrescentes in nemorosis prope *Apiahy*, Aut. 1881 (sub n. 1490-1556).

389. Phaeopeziza Puiggarii Speg. — l. c. n. 220.

Hab. Ad ramenta putrida coacervata in sylvis prope *Apiahy*, Jun. 1881 (sine n.).

390. Niptera? melioloides Speg. (n. sp.)

Diag. Ascomata orbicularia minuta tenuiter carnosula atra glabra; asci cylindracei paraphysati; sporidia clavulata didyma hyalina.

Hab. Ad folia *Ipomeae* in subiculo *Asterinae pseudopelliculosae* Speg. parasitans in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2848).

Obs. Cupulae minutulae sparsae v. hinc inde laxe aggregatae superficiales discoideae (200-250 μ dm.) superne applanatae inferne vix convexulae, hypothecio atro glabro, epithecio pallidiore ceraceo-olivaceo, obtuse submarginatae, contextu prosenchymatico-indistincto olivaceo; asci e cylindraceo obclavulati (40 × 8-10 μ) apice subtruncato-rotundati postice cuneato-attenuati brevissime pedicellati octospori, paraphysibus longioribus apice clavatis olivascentibus subcoalescentibusque obvallati; sporidia recte v. oblique disticha elongato-obovata (10-11 × 3-4 μ) superne obtuse inferne acutiuscule rotundata primo di-

blasta, dein medio 1-septata constrictula, hyalina (an demum olivascentia?). Iodi ope nulla.

391. Gorgoniceps leucophaeus Speg. (n. sp.)

Diag. Ascomata sessilia discoideo-cupulata extus aterrima, epithecio alba; asci cylindraceo-subclavulati parce paraphysati; sporidia ascorum longitudine lineari-fusoidea continua hyalina.

Hab. Ad corticem putrescentem truncorum in sylvis prope *Apiahy*, Aut. 1888 (sine n.).

Obs. Cupulae hinc inde aggregatae v. rarius sparsae superficiales in vivo cupulato-explanatae (1-3''' dm.) in sicco contracto-involutae, sessiles, durae coriacellae hypothecio aterrimo laevi glabro subnitente, epithecio albo v. vix subroseo laevissimo; asci cylindraceo-clavulati (200 × 8 μ) apice rotundati deorsum longiuscule attenuato-pedicellati octospori, paraphysibus filiformibus vix longioribus flexuosis obvallati; sporidia fusoideo-linearia (150-160 × 1,5-2 μ) utrinque acutiuscula, ascorum fere longitudine, continua v. subimperspicue septulata hyalína. Iode ope nulla.

392. Godronia splendida Speg. (n. sp.)

Diag. Ascomata sparsa erumpenti-superficialia scutellato-discoidea marginata, carnoso-coriacella extus atra glabra rugulosa, disco laevissimo pulchre aurantiaco; asci cylindracei paraphysati; sporidia filiformia ascorum longitudine hyalina.

Hab. Ad ramos corticatos emortuos in sylvis prope *Apiahy*, Oct. 1888 (sub n. 2919.)

Obs. Cupulae per peridermium erumpentes mox subsuperficiales scutellato-discoideae (2-3''' dm.) in vivo explanatae in sicco non v. vix anguloso-subcontractulae, epithecio applanato v. concaviusculo ceraceo laevissimo pulchre

aurantiaco, hypothecio coriaceo aterrimo opaco glabro ruguloso margine prominulo integro v. minute irregulariterque denticulato-lacero; asci cylindracei (200-230 × 10 μ) apice subtruncati, tunica non v. vix subincrassata, deorsum longe attenuato-pedicellati octospori, paraphysibus densis filiformibus hyalinis apice ramulosis ac dense mucoso-coalescentibus aurantiaco-granulosis obvallati; sporidia filiformia tenuissima (150-180 × 1) continua hyalina.

393. Calloria brasiliensis Speg. (n. sp.)

Diag. Ascomata orbiculari-effusa mediocria rubro-aurantia tenuia; asci cylindraceo-clavulati parce paraphysati; sporidia elliptico-fusoidea utrinque acuta hyalina.

Hab. In tela dejecta putrescente in hortis prope *Apiahy*, Aut. 1888 (sub n. 2335-2781).

Obs. Cupulae sparsae v. hinc inde gregariae saepeque confluentes, orbiculares (2-5‴ dm.) collabescenti-effusae tenuiter submembranaceae margine integrae, strictissime liberae, glaberrimae levissimae, in sicco non v. vix contractulae aurantio-rubrae; asci cylindracei (45-50 × 4 μ) apice truncato-rotundati deorsum longiuscule attenuato-pedicellati octospori, paraphysibus, parcissimis filiformibus obvallati; sporidia oblique monosticha elliptico-fusoidea (5 × 1-1,5 μ) utrinque acuta saepeque 1-guttulata continua hyalina. Iode ope nulla.

394. Stictis radiata Pers.

Var. *intermedia* Speg. — Fung. arg. pug. IV, n. 231.

Hab. Ad caules herbaceos dejectos putrescentes in pratis prope *Apiahy*, per ann. 1888 (sub n. 2622).

395. Stictis quadrifida Lév. — Speg., Fung. arg. pug. IV, n. 230.

Hab. Ad folia dejecta putrescentia *Drymidis* speciei cujusdam in sylvis prope *Apiahy*, per ann. 1881-88 (sub n. 1541-2716).

396. Schizoxylon bambusinum Speg. (n. sp.)

Diag. Ascomata infossa, margine erumpenti-prominulo albo integro, disco plano olivaceo minuto; asci cylindracei paraphysati; sporidia ascorum longitudine in articulis subcuboideis mox secedentia chlorinula.

Hab. Ad culmos dejectos putrescentes *Bambusaceae* cujusdam in uliginosis prope *Apiahy*, Maj. 1888 (sub n. 2386).

Obs. Cupulae hinc inde pauci-aggregatae v. rarius sparsae, primò globosae immersae mox cupulato-apertae, erumpentes, margine prominulo integro candido, disco (400-600 μ dm.) profundiusculo obscure olivaceo laevi; asci subcylindracei (45-50 $\times$ 8-9 μ) apice rotundati deorsum cuneati crasse breveque stipitati 8-spori? paraphysibus longioribus tenuibus apice saepe ramulosis obvallati; sporidia fasciculata linearia, jam in asco in articulis ellipticocuboideis (2 $\times$ 1,5 μ) minutis secedentia, chlorina. Iode ope nulla. Species habitu externo *Stictidi radiatae* Prs. simillima.

397. Pseudopeziza phyllachorophila Speg. (n. sp.)

Diag. Ascomata minuta sessilia olivascenti-fusca hypophylla circinantia; asci clavulati paraphysati; sporidia e cylindraceo elliptica hyalina.

Hab. Ad stromata vetusta *Phyllachorae trivialis* Speg. in foliis vivis *Asclepiadeae?* cujusdam prope *Apiahy*, Aut. 1881 (sub n. 1564).

Obs. Cupulae innato-superficiales minutae (300-500 μ dm. subsparsae v. laxe gregariae, in vivo applanato-concavae, in sicco contractulae subglobosae v. subhysterioideae, obtuse marginatae, disco obscure fusco-olivascente laevi, hypothecio olivascenti-testaceo glabro v. subpruinuloso,

contextu indistincto; asci e fusoideo clavulati (80-90 × 8-10 μ) apice obtuse rotundati subcrassiusculeque tunicati, deorsum longiuscule attenuato-pedicellati octospori, paraphysibus filiformibus sublongioribus, apice subcoalescentibus fuscescentibusque obvallati; sporidia saepius oblique monosticha ellipsoidea v. subcylindraceo-ellipsoidea (7-10 × 4-5 μ), utrinque obtuse rotundata continua hyalina. Iode ope nulla. Species pusilla parum perspicua, stromate olivascenti-fuscidulo in illo *Phyllachorae* innato-squarruloso donata.

398. Pseudopeziza sanguinolenta Speg. (n. sp.)

Diag. Ascomata minuta, discoideo-applanata fuscescenti-atra dense gregaria, macula indeterminata epiphylla obscure sanguineo-purpurascente cincta; asci e cylindraceo clavulati paraphysati; sporidia subfusoideo-obovata acutiuscula subinaequilateralia hyalina.

Hab. Ad folia viva *Pleromatis* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2711).

Obs. Maculae orbiculares (2-8''' dm.) epiphyllae indeterminatae obscure sanguineo-purpurascentes, ad hypophyllum vix fusco-manifestae dense gregariae saepeque confluentes; cupulae epiphyllae superficiales (erumpentes?) centro macularum densiuscule aggregatae, in vivo patellari-apertae (250-300 μ dm.), in sicco contractulae, epithecio flavescente laevi, hypothecio atro-fuligineo, minute papilloso-pruinuloso, contextu carnosulo, ambitu subparenchymatico, obscure fuligineo donatae; asci subclavulati (80-90 × 15 μ) apice subattenuati acutiusculeque rotundati deorsum cuneati modice attenuato-pedicellati octospori paraphysibus filiformibus sublongioribus saepe ramulosis obvallati; sporidia fusoideo-clavulata (22-25 × 5-6 μ) leniter inaequilateralia, utrinque acutiuscula, non v. grosse 1-guttulata, recte v. oblique disticha, continua hyalina. Iodi ope nulla.

399. Fabrea? melastomacearum Speg. (n. sp.)

Diag. Ascomata hypophylla saepius laxe circinantia primo fulva dein atra, patellaria minuta glabra; asci clavati dense paraphysati; sporidia elliptica didyma hyalina.

Hab. Ad folia viva *Melastomacearum* in campis prope *Apiahy*, per ann. 1882–88 (sub n. 2757-2931).

Obs. Maculae nullae v. saepius tantum epiphyllae pallescentes orbiculares (5–15''' dm.) indeterminatae; cupulae hypophyllae saepissime in orbe (3–5''' dm.) dispositae rarius inordinatae, innato-superficiales, in vivo lenticulari-patellares (300-500 μ dm.), in sicco subcupulato-contractulae, in prima aetate subsuccineae dein gradatim obscuriores postremo fusco-atrae glabrae laeves opacae; asci clavati (60-120 × 16-20 μ) apice obtuse v. subacutiuscule rotundati crassiuscule tunicati, deorsum attenuati modiceque pedicellati octospori paraphysibus filiformibus apice coalescentibus fuscescentibusque obvallati; sporidia recte disticha v. oblique monosticha, elliptica v. subovoidea (17-20 × 6-9 μ) utrinque subacutiuscule rotundata, recta v. lenissime inaequilateralia, primo continua dense granulosa dein medio 1–septata non v. vix constrictula, loculis subaequilongis (supero subcrassiore) continuis v. 1-pseudoseptatis, (an demun triseptata?) hyalina. Iode ope nulla v. vix obturaculo ascorum perdilute coerulescente. Species pulchella cum *Blitridio? melastomacearum* Wint. non comparanda.

400. Coccomyces brasiliensis Speg. (n. sp.)

Diag. Maculae albo-pallescentes indeterminatae; ascomata hypophylla quadrata minuta, quadrifido-erumpentia atra glabra; asci cylindracei paraphysati; sporidia filiformia ascorum longitudine septulata hyalina.

Hab. Ad folia coriacea dejecta putrescentia in sylvis prope *Apiahy*, Dec. 1882 (sub n. 2928).

Obs. Maculae amphigenae albo-pallescentes majusculae

(5-15‴ dm.) indeterminatae; cupulae hypophyllae in maculis sparsae v. laxe gregariae, applanato-quadratae rarius trigonae (300-600 μ dm.) obtuse angulatae primo tectae dein epidermide cruciatim disrupta cinctae, extus intusque atrae glabrae opacae, contextu parenchymatico subindistincto fusco-fuligineo; asci cylindracei (90-100 × 8-10 μ) sursum rotundati, tunica non v. vix subincrassatula, deorsum modice attenuato-pedicellati paraphysibus apice non v. vix clavulato-incrassatis (1,5-2 μ crs.) obvallati; sporidia filiformia (70-80 × 2 μ) utrinque obtusiuscule a[illegible]tata, primo dense guttulata dein septulata hyalina.

401. Sphinctrina? candida Speg. (n. sp.)

Diag. Ascomata gregaria turbinato-expansa sessilia v. stipitata, superne applanata, candida coriacea glabra; asci cylindracei paraphysati; sporidia ellipsoidea inaequilateralia hyalina.

Hab. Ad terram argillosam denudatam in pratis prope *Apiahy*, Aut. 1881 (sub n. 1658).

Obs. Cupulae sparsae v. hinc inde dense aggregatae, inferne turbinato-obconicae in stipite plus minusve evoluto (0,5–3‴ lg. × 0,5‴ crs.) exerto v. terrae infosso producta superne applanato-convexula (1-2‴ dm.) immarginata, centro saepe umbilicatula, extus intusque alba coriacea duriuscula, glabra laevia; asci cylindracei (130-140 × 8-10 μ) apice rotundati deorsum attenuati modice pedicellati octospori paraphysibus densiusculis filiformibus subcoalescentibus apice botryoso-granulosis obvallati; sporidia recte v. oblique monosticha elliptica v. ovoidea (18-20 × 4-6 μ) utrinque acutiuscule obtusata recta v. leniter inaequilateralia continua hyalina. Iodi ope paraphyses ac mucus hymenialis leniter coerulescunt. Species pulchella lichenina sed a fungis etiam non satis abhorrens.

402. Calycium peraffine Speg. (n. sp.)

Diag. Ascomata minutissima stipite cylindrico suffulta atra; asci cylindracei paraphysati; sporidia ellipsoidea continua v. 1-septata fuliginea.

Hab. Ad ligna cariosa vetusta in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2602).

Obs. Maculae cinerascenti-albae indeterminatae squarruloso-furfuraceae late irregulariterque expansae; thallus nullus; cupulae subglobosae (250-300 μ dm.) superne subpulverulentae fusco-atrae, inferne applanatae ac in stipite cylindraceo (0,5-1''' lg. × 60-90 μ crs.) atro laevi opaco glabro productae; asci cylindracei (45-50 × 3-4 μ) apice subtruncato-rotundati deorsum modice attenuato-pedicellati octospori, paraphysibus filiformibus longioribus vix apice fuscescentibus ac subcoalescentibus obvallati; sporidia suboblique monosticha ellipsoidea (6-7 × 2,5-3 μ) utrinque obtusiuscula, recta v. leniter inaequilateralia continua v. saepius medio 1-septata non constricta fuliginea. Iodi ope nulla. Species inter *C. magellanicum* Speg. et *C. hyperellum* Ach. vere media, ab utraque tamen satis distincta; an unius speciei varietates tantum?

FUNGI IMPERFECTI

SPHAEROPSIDEAE Lév.

403. Phyllosticta brasiliensis Speg. (n. sp.)

Diag. Maculae epiphyllae griseae determinatae; perithecia circinantia minuta atra; sporulae ellipsoideae e hyalino chlorinae.

Hab. Ad folia viva *Zanthoxyleae* v. *Anacardiaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1888 (sub n. 2365).

Obs. Status sporuliferus *Leptosphaeriae brasiliensis* Speg.;

maculae et perithecia ut in statu ascophoro; sporulae e cylindraceo ellipsoideae (4-8 × 2-3 μ) utrinque obtusae non v. grosse 2-guttulatae e hyalino chlorinae.

404. Phyllosticta melastomacearum Speg. (n. sp.)

Diag. Maculae determinatae amphigenae rufescentes; perithecia membranacea ostiolata atra; sporulae ellipsoideae hyalinae.

Hab. Ad folia viva *Melastomacearum* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2480).

Obs. Maculae amphigenae irregulariter orbiculari-repandae (3-6‴ dm.) rufescentes determinatae, zona stricta obscuriore cinctae; perithecia in centro macularum laxe aggregata minutissima (70-80 μ dm.) epidermide velata, atra, tenui-membranacea, parenchymatica ostiolo minuto perforata; sporulae ellipsoideae (4-5 × 1,5-2 μ) utrinque plus minusve obtusae non v. 1-2-guttulatae hyalinae.

405. Phyllosticta? pleromatis Speg. (n. sp.)

Diag. Maculae determinatae amphigenae albo-cinerascentes; perithecia minuta coriacea astoma; sporulae elliptico-fusoideae hyalinae.

Hab. Ad folia viva *Pleromatis* speciei cujusdam in herbosis prope *Apiahy*, Hiem. 1888 (sub n. 2385).

Obs. Maculae amphigenae irregulariter expansae (3-10‴ dm.) determinatae, ex albo subcinerascentes zona strictissima fuscescente cinctae; perithecia laxe in maculis aggregata minuta (150-200 μ dm.) epidermide velata adnataque atra coriacella contextu indistincto, astoma per aetatem lacero-dehiscentia: sporulae ellipsoideae v. fusoideae (6-8 × 2,5-3 μ) saepius utrinque acutiusculae non v. 2-guttulatae hyalinae.

406. Phyllosticta aurantiicola (Brk. et C.) Sacc.—Syll. sphrp. et mel. f. 13.

Hab. Ad folia viva *Citri aurantii* in hortis prope *Apiahy*, Aut. 1888 (sub n. 2388 b.).

Obs. Maculae amphigenae subdeterminatae albae zona cinerascente cinctae; perithecia densiuscule gregaria epiphylla atra lenticularia (200-250 μ dm.) coriacella contextu indistincto; sporulae ellipsoideo-clavulatae v. obovatae (7-8 × 3 μ) utrinque obtusiusculae hyalinae; sterigmata non visa.

407. Phyllosticta libertiana Sacc. et March. — Rev. myc. 1885.

Hab. Ad folia viva *Violae odoratae* in hortis prope *Apiahy*, Aut. 1888 (sub n. 2615).

Obs. Maculae amphigenae orbiculares determinatae albae; perithecia centro macularum laxe aggregata minuta (70-80 μ) parenchymatica ostiolata atra; sporulae ellipsoideae utrinque obtusae (4–6 × 2-5 μ) hyalinae.

408. Phyllosticta osteospora Sacc. — l. c. f. 34.

Hab. Ad folia viva *Baccharidis* speciei cujusdam in campis prope *Apiahy*, Aut. 1888 (sub n. 2782).

Obs. Maculae obsoletae rufescentes parvulae; sporulae bacillares (8–10 × 1 μ) utrinque incrassatulae hyalinae.

409. Phyllosticta myrticola Speg. (n. sp.)

Diag. Maculae amphigenae orbiculares candidae determinatae; perithecia minuta membranacea ostiolata; sporulae ellipsoideo-ovoideae hyalinae.

Hab. Ad folia viva *Eugeniae* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2773).

Obs. Maculae sparsae v. rarius aggregato-confluentes parvulae (2-5‴ dm.) arescenti candidae amphigenae zona strictissima superne vinosa inferne subrufescente determinato-cinctae; perithecia epiphylla in centro macularum laxe gregaria lenticularia (80-90 μ dm.) atra epidermide

velata, contextu parenchymatico olivaceo, ostiolo rotundo minuto donata; sporulae ellipsoideae v. obovatae (3–5 × 1-1,5 μ) utrinque obtusae ac minute 1-guttulatae hyalinae.

410. Phyllosticta lantanoides Pk.

Hab. Ad folia viva *Viburni* speciei cujusdam cultae in hortis prope *Apiahy*, Aut. 1888 (sub n. 2367-2482).

Obs. Maculae sparsae orbiculares v. angulosae (2–5''' dm.) superne determinatae ex albo argenteae, purpureo-v. sanguineo-cinctae, inferne subindeterminatae rufescentes fusco-cinctae; perithecia epiphylla in centro macularum laxe aggregata lenticularia (150-180 μ dm.), epidermide velata atra coriacella contextu indistincto olivaceo, ostiolo parvulo rotundo perforata; sporulae ellipsoideae (5–7 × 2–2,5 μ) utrinque attenuato-obtusatae non v. 2-guttulatae hyalinae.

411. Phoma cocophila Speg. (n. sp.)

Diag. Maculae albae irregulares; perithecia lenticularia parenchymatico-membranacea; sporulae elliptico-obovatulae hyalinae.

Hab. Ad petiolos longuidos *Cocöes* speciei cujusdam in campis propre *Apiahy*, Aut. 1888 (sub n. 2456).

Obs. Maculae candidae elongatae repando-sinuosae subindeterminatae (5-20''' lg. × 2-5''' lt.); perithecia in maculis laxe gregaria epidermide velata non v. vix prominula atra lenticularia (250 μ dm.) membranaceo-subcoriacella, contextu parenchymatico parum distincto, ostiolo vix papillulato donata; sporulae cylindraceae v. ellipsoideo-obovatae (8–10 × 2,5-3 μ) rectae v. vix subinaequilaterales utrinque obtusiusculae ac saepe minute 1-guttulatae hyalinae, sterigmatibus cylindraceis apice attenuato-obtusiusculis (12-15 × 2-2,5 μ) concoloribus suffultae.

412. Chaetophoma? asterinarum Speg. (n. sp.)

Diag. Perithecia sparsa globosa astoma atra, pilis circinatis adspersa; sporulae cylindraceo-fusoideae chlorinae.

Hab. Ad folia viva plantae ignotae in *Asterina* parasitans prope *Apiahy*, Aut. 1881 (sub n. 1639).

Obs. Mycelium et perithecia ut in *Dimerosporio asterinarum* Speg. cujus statum sporuliferum sistit; sporulae utrinque subtruncatulae (20-22 × 2,2-5 μ) rectae v. leniter inaequilaterales continuae v. rarius 1-pseudoseptatae chlorinae.

413. Chaetophoma microstoma Speg. (n. sp.)

Diag. Perithecia sparsa globulosa atra glabra minute ostiolata; sporulae ellipsoideae hyalinae.

Hab. Ad folia languida *Sapindaceae* cujusdam in dumetis prope *Apiahy*, Hiem. 1881 (sub n. 1507).

Obs. Mycelium ac perithecia ut in *Dimerosporio? microstomo* Speg. cujus statum sporuliferum sistit; sporulae ovoideae v. ellipticae utrinque obtusae (5-6 × 2,5-3 μ) majuscule 2-guttulatae hyalinae.

414. Chaetophoma? perpusilla Speg. (n. sp.)

Diag. Perithecia globoso-ovata atra glabra astoma; mycelium tenuissimum fibrillosum olivaceum; sporulae naviculari-elongatae chlorinae.

Hab. In mycelio *Asterinae pseudopelliculosae* Speg. parasitans ad folia viva *Ipomeae* cujusdam prope *Apiahy*, Aut. 1888 (sub n. 2848).

Obs. Mycelio e fibris tenuibus (2-4 μ crs.) laxe irregulariterque ramulosis parce septulatis olivaceis hyphas *Asterinae* incrustantibus compositum; perithecia sparsa e globoso ovoidea (40-60 μ) superficialia glabra olivacea astoma per aetatem apice irregulariter dehiscentia, tenui-membranacea, contextu parum distincto; sporulae elongato-subnaviculares (10 × 2,5-3 μ) utrinque obtusiusculae continuae chlorinae.

415. Asteromella perpusilla Speg. (n. sp.)

Diag. Maculae epiphyllae pallescentes determinatae; perithecia laxe gregaria superficialia globosa olivaceo-atra; sporulae cylindraceae hyalinae.

Hab. Ad folia viva plantae cujusdam ignotae prope *Apiahy*, Aut. 1888 (sub n. 2703).

Obs. Maculae epiphyllae orbiculares (2–5''' dm.) saepe confluentes sordide subcinerascentes, linea tenuissima rufescente cinctae; perithecia centro macularum laxe aggregata subsuperficialia ex ovoideo globosa (40–50 μ dm.) glabra atra, tenui-membranacea pellucida, contextu indistincto (anhisto ?) pallide olivacea astoma, per aetatem superne irregulariter dehiscentia; sporulae cylindraceae (7–8 × 2,5-3 μ) utrinque obtusissimae rectae v. subcurvulae nubiloso-farctae hyalinae.

416. Sirococcus brasiliensis Speg. (n. sp.)

Diag. Maculae nullae; perithecia subepidermica lenticularia atra glabra ostiolata; sporulae ellipticae catenulatae hyalinae.

Hab. Ad folia dejecta putrescentia *Bignoniaceae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2484).

Obs. Perithecia saepius epiphylla sparsa v. hinc inde laxe 3-5-aggregata, non v. vix prominula (150–200 μ dm.) atra, epidermide velata membranacea, contextu parenchymatico parum distincto fuligineo donata, ostiolo rotundo (10 μ dm.) perforata; sporulae e cylindraceo ellipsoideae continuae hyalinae catenulatae.

417. Pyrenochaeta myrtacearum Speg. (n. sp.)

Diag. Maculae orbiculares determinatae albido-v. cinerascenti-arescentes; perithecia laxe gregaria lenticularia ostiolato-barbatula; sporulae e globoso ovoideae hyalinae.

Hab. Ad folia viva *Myrtaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2777).

Obs. Maculae amphigenae orbiculares v. confluendo-irregulares (2-5''' dm.) determinatae arescentes ex albo cinerascentes; perithecia epiphylla in centro macularum laxe gregaria lenticularia (80-90 μ) non v. vix prominula coriacella, contextu indistincto, ostiolo rotundo pilis paucis rigidulis erectis obtusis simplicibus (20-50 × 5 μ) opace fuligineis septulatis coronato donata; sporulae ellipsoideae v. ovoideae v. etiam globosae (2-4 × 2 μ) hyalinae.

418. Vermicularia ? melastomacearum Speg. (n. sp.)

Diag. Maculae cinerascentes determinatae; perithecia epiphylla lenticularia astoma laxe minuteque pilosa; sporulae cylindraceae hyalinae.

Hab. Ad folia viva *Melastomaceae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2756).

Obs. Maculae epiphyllae orbiculares determinatae (2-5''' dm.) sordide ex albo cinerascentes v. rufescentes, zona stricta fusco-rufescente cinctae; perithecia innato-erumpentia lenticularia (80-90 μ) in sicco subcollabescentia atra tenuissime membranacea, contextu parenchymatico-fuligineo, ostiolo destituta, superne setulis paucis cylindraceis rigidulis (30 × 3 μ) simplicibus obtusis base non v. vix incrassatis, 2-3-septatis fuligineis adspersa; sporulae cylindraceae rectae (12-15 × 4 μ) superne obtusae inferne acutiusculae hyalinae.

419. Robillarda? macropoda Speg. (n. sp.)

Diag. Maculae amphigenae albescentes determinatae; perithecia circinantia gregaria lenticularia irregulariter dehiscentia; sporulae cylindraceae hyalinae continuae apice trifidae v. tri-setulosae longe stipitatae.

Hab. Ad folia viva *Myrtaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2473).

Obs. Maculae orbiculares (5-8''' dm.) sparsae amphigenae albae v. pallidissime subfulvescentes determinatae zona

strictissima obscure rufescente cinctae; perithecia ad marginem macularum densiuscule constipata atra lenticularia (80-100 μ) primo tecta clausa dein erumpentia atque superne irregulariter lacero-dehiscentia prosenchymatica; sporulae subcylindraceae (20 × 2 μ) deorsum lenissime attenuatae apice abrupte trifidae v. 3 setulis divaricatis (20 × 1 μ) crassiusculis coronatae, sterigmatibus longiusculis (30-50 × 1 μ) monosporis simplicibus suffultae.

420. Ascochyta Puiggarii Speg. — Sacc., l. c. f. 391.
Hab. Ad folia viva *Myrtaceae* cujusdam in nemorosis prope *Apiahy*, Aut. 1880 (sine n.).

421. Actinonema rosae (Lib.) Fr. — Sacc., l. c. f. 408.
Hab. Ad folia viva *Rosae* speciei cujusdam cultae in hortis prope *Apiahy*, Oct. 1888 (sub n. 2934).

422. Darluca filum (Biv.) Cast. — Sacc., l. c. f. 410.
Hab. Ad folia viva *Leguminosarum*, socia *Uredine* quadam, in dumetis prope *Apiahy*, Aest. 1888 (sub n. 2720-2767).

423. Couturea biseptata Speg. (n. sp.)
Diag. Perithecia hypophylla gregaria superficialia, mycelio vix ullo atro cincta, globosa astoma nigra; sporulae elliptico-lanceolatae 2-septatae, hyalinae breviter stipitatae.
Hab. Ad folia subcoriacea viva plantae ignotae cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2832).
Obs. Perithecia hypophylla densiuscule gregaria globulosa (100-150 μ dm.) plagulas atras (2-5''' dm.) efficientia, rugulosa, nigra astoma coriacella, contextu indistincto base fibris mycelialibus (obsoletis ?) atris flexuosulis gracilibus (4-6 μ crs.) parcissimis cincta; sporulae ellipticae v. subclavulatae 2-septatae non constrictae, majusculae (40-45 × 14-15 μ) superne obtuse rotundatae inferne subtruncatae, stipite breviusculo (5-10 × 4-5 μ) concolore suffultae

primo hyalinae dein rufescentes. An huc *Meliola cymbisperma* Mntgn.?

424. SEPTORIA AURANTIICOLA Speg. (n. sp.)

Diag. Maculae amphigenae albae determinatae; perithecia spuria? minuta atra; sporulae lineares falcatae hyalinae continuae.

Hab. Ad folia languida *Citri aurantii* in hortis prope *Apiahy*, Aut. 1888 (sub n. 2730).

Obs. Maculae amphigenae irregulariter expansae (3-200''' dm.) candidae determinatae zonula stricta fusco-subatra subnitente cinctae; perithecia in maculis sparsa amphigena globoso-conoidea (120–150 μ) innata atra astoma spuria?, contextu fusco indistincto; sporulae filiformes (40–50 × 2 μ) falcatae utrinque obtusae grosse 1-guttulatae hyalinae.

425. SEPTORIA DIANTHOPHILA Speg. (n. sp.)

Diag. Maculae nullae; perithecia sparsa lenticularia ostiolata tecta; sporulae subcylindraceae vix curvulae continuae v. 1-septatae hyalinae.

Hab. Ad caules exsiccatos *Dianthi cariophylli* in hortis prope *Apiahy*, Aut. 1888 (sub n. 2591).

Obs. Species *S. sinarum* Speg. et *S. carthusianorum* West. peraffinis, satis, ut videtur, tamen distincta; perithecia lenticularia (70–100 μ) epidermide tecta tenui membranacea parenchymatica atra, ostiolo latiusculo (15 μ dm.) perforata; sporulae e cylindraceo v. subclavulato fusoideae (20–25 × 2,5 μ) utrinque obtusiusculae, continuae v. medio 1-septatae, non constrictae hyalinae.

426. SEPTORIA PUIGGARII Speg. (n. sp.)

Diag. Maculae parvulae amphigenae fuscae determinatae; perithecia lenticularia membranacea parenchymatica atra

ostiolata; sporulae obclavulato-fusoideae arcuatae continuae hyalinae.

Hab. Ad folia viva *Walteriae* speciei cujusdam in pratis propre *Apiahy,* Aest. 1888 (sub n. 2475).

Obs. Maculae orbiculares (1-2''' dm.) v. confluendo irregulares, amphigenae sordide fulvescenti-fuscidulae determinatae, saepius zona obscuriore cinctae ; perithecia in macularum centro 3-8-aggregata amphigena epidermide velata atra lenticularia (80-90 μ dm.) tenuissime membranacea, contextu parenchymatico parum distincto fumoso-olivaceo, ostiolo minutissimo perforata; sporulae obclavato-fusoideae (40-60 × 2-2,5 μ) utrinque attenuato-acutatae, valide falcatae continuae hyalinae.

427. Phleospora baccharidicola Speg. (n. sp.)

Diag. Maculae nullae; perithecia hinc inde dense aggregata noduloso-prominula globulosa atra coriacea ostiolata; sporae cylindraceae utrinque obtusissimae rectae v. arcuatae saepius continuae hyalinae.

Hab. Ad folia viva *Baccharidis* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2782).

Obs. Perithecia amphigena hinc inde 5-50-constipata, innato-subsuperficialia, subglobosa (150-180 μ dm.) epidermide velata, atra, coriacea, contextu indistincto, ostiolo subpapillato perforata ; sporulae rectae hamatae v. falcatae, cylindraceae v. lenissime subclavulatae (60-100×4-5 μ) apice rotundatae base truncatae, continuae v. rarius 1-2-pseudoseptatae nubiloso-farctae hyalinae.

428. Sphaeronemella mirabilis Speg. (n. sp.)

Diag. Perithecia gregaria v. subfasciculata cylindracea cinnabarina glabra; sporulae ellipsoideae v. ovoideae hyalinae.

Hab. Ad cortices dejectos putrescentes in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1552).

Obs. Species pulchella habitu *Stilbum cinnabarinum* capitulo

orbatum simulans; perithecia hinc inde 3-20 gregaria, cylindracea (2-3''' lg. × 250-300 μ crs.) saepe base confluentia, rarissime sparsa, erecta v. subarcuata teretia sursum attenuata apiceque obtusa, pulchre intenseque cinnabarina v. sanguinea, deorsum fuscescentia laevia glaberrima coriacella, contextu carnosulo indistincto; sporulae ellipticae v. ovoideae (2,5-4 × 1-1,5 μ) continuae hyalinae, sporophoris filiformibus (6-10 × 1 μ) monosporis concoloribus, cavitatem internam peritheciorum vestientibus suffultae. Species simillima specimini sterili, sub nomine *Psilopeziae mirabilis* B. et C., mihi a Clar. Wrightio misso; an identica?

429. Leptostroma myrtinum (Dur. et Mntgn.) Speg. — Sacc., f. 629 (sub *Leptothyrio*).

Hab. Ad folia dejecta putrescentia *Myrtaceae* cujusdam in nemorosis prope *Apiahy,* Aut. 1880 (sine n.).

Obs. Perithecia coriacella tecta contextu indistincto, idcirco melius *Leptostroma ?*

430. Leptothyrium zonatum Speg. (n. sp.)

Diag. Perithecia hypophylla sparsa superficialia scutato-dimidiata, astoma membranacea contextu prosenchymatico-radiante zonato; sporulae ellipticae v. ovoideae hyalinae.

Hab. Ad folia viva *Myrtaceae* cujusdam in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2838).

Obs. Perithecia majuscula (400-600 μ dm.) tenui, membranacea scutato-adfixa applanata, non v. vix papillato-prominula atra glabra margine integra v. vix crenato-repanda, matrici arctiuscule adnata, contextu olivaceo pellucido prosenchymatico-radiante undulato-zonato; sporulae ellipsoideae (4-5 × 2 μ) eguttulatae hyalinae, sterigmatibus longiusculis gracillimis (20-25 × 1) concoloribus ramulosis suffultae.

431. LEPTOTHYRIUM SUBZONATUM Speg. (n. sp.)

Diag. Perithecia hypophylla sparsa superficialia scutato-dimidiata astoma membranacea prosenchymatico-radiantia zonulata ; sporulae cylindraceae hyalinae.

Hab. Ad folia viva *Myrtaceae* cujusdam in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2343).

Obs. Species priori simillima, peritheciis vix minoribus (200-250 μ), sporulis cylindraceis (4 × 1 μ) utrinque truncato-rotundatis eguttulatis, sterigmatibus brevioribus (10-15 × 1 μ) recedens. An ejusdem tantum varietas ?

TRICHOPELTULUM Speg. (n. gen.)

Char. Mycelium e fibris pro ratione majusculis membranaceo-applanatis vittaeformibus non costatis dendritico-ramulosis prosenchymatico-contextis efformatum ; perithecia superficialia v. fibris tecta dimidiato-scutata parvula ostiolata ; sporulae continuae hyalinae. Status sporuliferus *Trichopeltidis*.

432. TRICHOPELTULUM PULCHELLUM Speg. (n. sp.)

Diag. Vittae mycelii membranaceo-pellucidae prosenchymaticae olivaceae laxe ramoso-intricatae longiusculae atque latiusculae ; perithecia pusilla ostiolo rotundo perforata ; sporulae hyalinae minutissimae utrinque subtruncatae continuae.

Hab. Ad folia viva *Myrtacearum* in dumetis prope *Apiahy*, Hiem. 1888 (sub n. 2364).

Obs. Species statum sporuliferum *Trichopeltidis pulchellae* Speg. sistens ; mycelium et perithecia ut in statu ascophoro ; sporulae cylindraceae (4-6 × 1 μ) utrinque subtruncato-rotundatae rectae v. lenissime inaequilaterales continuae.

433. SACIDIUM ?? BRASILIENSE Speg. (n. sp.)

Diag. Perithecia hemisphaerica minuta atra superficialia

anhista ; sporulae e globoso ellipticae continuae e chlorino hyalinae.

Hab. Ad folia viva *Polygoni* speciei cujusdam in uliginosis prope *Apiahy*, Aut. 1888 (sub n. 2618).

Obs. Maculae nullae ; perithecia sparsa epi- (rarius hypo-) phylla e lenticulari hemisphaerica (250-300 μ dm.) atra glabra laevia astoma subcoriacella, contextu anhisto pellucido fuscescente ; sporulae conglobatae e globoso ellipsoideae (8 × 6-7 μ) crassiuscule tunicatae hyalinae, sub luce refracta chlorinae. *Sacidii* species haec et aliae perplurimae (*S. spegazzinianum* Sacc., *S. venetum* Speg., *S. ulmariae* Sacc. et Roum., *S. chartarum* Sacc. et Pnz.) *sine dubio ullo delendae, nam sporangia Pilobolorum expulsa tantum sistunt !*

434. Asterostomella peraffinis Speg. (n. sp.)

Diag. Subiculum et perithecia ut in statu ascophoro ; sporulae obovatae continuae fuligineae.

Hab. Ad folia viva *Asclepiadeae* cujusdam in sylvis prope *Apiahy*, Apr. 1888 (sub n. 2861).

Obs. Species statum sporuliferum *Asterinae peraffinis* Speg. sistens ; sporulae dense constipatae ovoideae (12-15 × 8-10 μ) eguttulatae fuligineae.

435. Lasmenia brasiliensis Speg. (n. sp.)

Diag. Stromata et loculi ut in statu ascophoro ; sporulae discoideae 1-guttulatae fuligineae.

Hab. Ad folia viva *Myrtaceae* v. *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2859).

Obs. Species statum sporuliferum *Phyllachorae brasiliensis* Speg. sistens ; sporulae applanato-discoideae (6-8 μ dm.) inferne saepius apiculatae 1-guttulatae subopace fuligineae.

436. Lasmenia subcoccodes Speg. (n. sp.)

Diag. Stromata ut in statu ascophoro; sporulae discoideae fuligineae.

Hab. Ad folia viva *Leguminosae* scandentis cujusdam in dumetis prope *Apiahy*, Maj. 1888 (sub n. 2841).

Obs. Species statum sporuliferum *Roussöellae subcoccodis* Speg. sistens.

437. Melophia phyllachoroides Speg. — Fung. guar. pug. I, n. 360.

Hab. Ad folia viva *Oplismeni* speciei cujusdam in nemorosis prope *Apiahy*, Aest. 1888 (sub n. 2563).

Obs. Sporulae subclavato-fusoideae (20–28 × 3 μ) leniter falcatae continuae hyalinae.

438. Melophia sapindacearum Speg. (n. sp.)

Diag. Maculae nullae v. indeterminatae pallescentes; stromata epiphylla minuta innata applanata atra opaca; loculi dense constipati pusilli; sporulae filiformes continuae hyalinae.

Hab. Ad folia viva *Sapindaceae* cujusdam in nemorosis prope *Apiahy*, Aut. 1881 (sub n. 1557).

Obs. Stromata epiphylla innato-subsuperficialia atra opaca orbiculari-applanata (2–3''' dm.) non v. vix papillulosa; loculi globosi (120-180 μ dm.) dense constipati albofarcti; sporulae filiformes (20–40 × 1–1,5 μ) utrinque obtusiusculae rectae v. flexuosulae, rarius subfalcatae continuae hyalinae.

Coniothyriella Speg. (n. gen.)

Char. Perithecia minuta innata cupulato-aperta margine setulosa; sporulae ellipsoideae olivaceae continuae.

439. Coniothyriella phyllostictoides Speg. (n. sp.)

Diag. Maculae orbiculares determinatae amphigenae; perithecia innata minuta atra primo tecta dein erumpenti–

aperta margine setulosa ; sporulae ellipsoideae fuligineo-olivaceae.

Hab. Ad folia viva coriacea *Maytheni* speciei cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2766).

Obs. Maculae orbiculares (2–5''' dm.) determinatae superne candidae inferne saepius sordide fulvescentes, saepius zona latissime purpurascente cinctae ; perithecia in maculis laxe sparsa epiphylla lenticularia (100–150 μ dm.) primo epidermide velata dein erumpenti-libera subpatellaria atra, margine setulis (100–150 × 5 μ) paucis fumosis teretibus acutiusculis 3–5–septatis mox deciduis ornata, subcarnosula, contextu parenchymatico fumoso-olivascente donata; sporulae in superficie epithecii dense constipatae, ellipsoideae v. subnaviculares (8–10 × 4 μ) utrinque obtusiusculae continuae olivaceo-fuligineae.

ACANTHOTHECIUM Speg. (n. gen.)

Char. Perithecia (an sporidochia ?) superficialia cupulata atra margine setulosa; sporulae cruciato-quadrifidae (X-formes) pluriseptulatae, hyalinae.

Genus perpulchrum inter *Excipulaceas* et *Tubercularieas dematieas* dubium.

440. ACANTHOTHECIUM MIRABILE Speg. (n. sp.)

Diag. Maculae nullae; perithecia minuta epiphylla glomerulata superficialia hispido setulosa atra, epithecio pallescente donata ; sporulae subcruciatim quadrifidae ramis falcato oppositis puncto centrali tantum connatis, uno breviore in sterigmate producto donata hyalina.

Hab. Ad folia viva *Zanthoxyleae* cujusdam in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2845).

Obs. Perithecia hinc inde dense 5–12–constipata, glomerulos orbiculares (1-3''' dm.) setulosos atro-nitentes efficientia, epiphylla subcupulata (350–750 μ dm.) atra carnosula, contextu fusco-olivaceo prosenchymatico-fibroso, fibris

septulatis extus solutis ac fasciculatis setulas atras (100-500 μ lg. × 20 μ crs.) constituentibus, saepeque matrici adnatis repentibusque; sporulae pulcherrimae, quadrifidae, antheris *Graminacearum* simillimae, X-formes, ramulis 2 superis acutis divaricatis (45-50×3 μ) inferis subparallelis brevioribus crassioribusque (25-30 × 4 μ) altero libero altero in sterigmate bifido (bisporo) producto, omnibus 1-septatis, hyalinae.

441. Protostegia pusilla Speg. (n. sp.)

Diag. Maculae amphigenae cinerascentes determinatae angulosae; perithecia lenticularia minuta erumpentia sordide fusca; sporulae filiformes continuae hyalinae.

Hab. Ad folia coriacea dejecta putrescentia in sylvis prope *Apiahy*, Dec. 1882 (sub n. 2928).

Obs. Maculae amphigenae dense sparsae (1-3''' dm.) anguloso-polygonae determinatae (nervulis limitatae) saepe latissime confluentes, superne pallescenti-cinerascentes, inferne fusco-cinereae; perithecia epiphylla in maculis sparsa v. laxe aggregata, primo tecta dein erumpentia, minuta (180-200 μ dm.), in vivo lenticulari-hemisphaerica in sicco cupulata, hypothecio tenuissimo atro, contextu pellucido fuligineo imperspicuo, disco pallescente donata; sporulae lineares flexuosae (30-40 × 1 μ) utrinque obtusiusculae continuae hyalinae e strato proligero carnoso crassiusculo albo oriundae.

MELANCONIEAE Brk.

442. Gloeosporium ? brasiliense Speg. (n. sp.)

Diag. Maculae amphigenae albae determinatae; acervuli

amphigeni densiuscule sparsi minuti fuscescentes; conidia subcylindracea hyalina.

Hab. Ad folia viva *Zanthoxyleae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2473).

Obs. Maculae quandoque centrales orbiculares (3–6‴ dm.) quandoque marginales difformes (3–20‴ dm.) sordide albae determinatae areola strictissima fusco-purpurascente cinctae ; acervuli epidermide tecti mox erumpentes, perithecio? (100–120 μ dm.) spurio fuscidulo scutato astomo tecti ; conidia cylindracea v. obovato-cylindracea (2-3 × 1 μ) utrinque obtusissima (an catenulata?) recta continua hyalina, sterigmatibus mono-v. bi-sporis cylindraceis (5-10 × 1 μ) suffulta.

443. Gloeosporium citricolum Speg. (n. sp.)

Diag. Maculae amphigenae maximae indeterminatae albocinerascentes ; acervuli amphigeni laxe gregarii lenticulares minuti fuscescentes ; conidia cylindracea hyalina.

Hab. Ad folia viva *Citri limonii* in hortis prope *Apiahy*, Aest. 1888 (sub n. 2388 *a*).

Obs. Maculae saepe totum folium occupantes arescentes sordide albo-cinereae ; acervuli amphigeni sparsi v. laxe gregarii minuti (200–300 μ dm.) primo tecti dein erumpentes; conidia e cylindraceo obovata (14-18 × 6–7 μ) utrinque obtussime rotundata medio saepe coarctata recta v. leniter inaequilateralia hyalina, sterigmatibus cylindraceis (20–30 × 5 μ) sursum subbattenuatis apice truncatis basin versus subfuscescentibus suffulta.

444. *Gloeosporium albi-macula Speg. (n. sp.)

Diag. Maculae orbiculares amphigenae albae determinatae; acervuli minuti epiphylli fusci ; conidia ellipsoideo-obovata hyalina.

Hab. Ad folia subcoriacea plantae cujusdam ignotae in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 1712).

Obs. Maculae majusculae (3-20''' dm.); acervuli subconoidei (120–150 μ) dense sparsi, primo epidermide velati dein erumpentes; conidia ellipsoidea v. obovata utrinque obtusiuscula (14–16 × 6–7 μ) continua nubilosa.

445. Gloeosporium urediniforme Speg. (n. sp.)

Diag. Maculae minutae indeterminatae pallescentes; acervuli epiphylli minuti fusco-fulvescentes; conidia cylindraceo-obovata hyalina.

Hab. Ad folia non coriacea *Cissi?* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2702).

Obs. Maculae sparsae v. subconfluentes superne fulvescentes inferne fulvo-albidae parvulae (1–2''' dm.) indeterminatae; acervuli in centro macularum dense constipati lenticulares (80–90 μ dm.) fusco-fulvi mox erumpentes, pustulam *Uredinis* cujusdam simulantes; conidia cylindracea v. ellipsoideo-obovata (4-5 × 1 μ) utrinque plus minusve acutata, sterigmatibus vix evolutis papillaeformibus suffulta.

446. Gloeosporium nitidulum Speg. (n. sp.)

Diag. Maculae amphigenae subdeterminatae pallescentes; acervuli minuti epiphylli fusci; conidia obovato-ellipsoidea mediocria hyalina.

Hab. Ad folia viva *Cissi* ? speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2702).

Obs. Species cum priore in eodem folio vigens sed certe distincta longeque abhorrens. Maculae amphigenae orbiculares (2-5''' dm.) utrinque e fulvescente pallescentes; acervuli pauci, in maculis sparsi, e lenticulari conoidei (150–200 μ) mox erumpentes; conidia ellipsoidea (10-12 × 5 μ) utrinque subacutiuscule rotundata ac minutissime subappendiculata (an tunica tantum apiculiformi incrassata, aut loculo minuto spurio ?) continua hyalina, sterig-

matibus cylindraceis (7-10 × 3 μ) concoloribus monosporis suffulta.

447. Trullula olivascens Sacc. — Syll. sphrp. et mel. f. 731.
Hab. Ad petiolos putrescentes *Cocöes* cujusdam in campis prope *Apiahy*, Aest. 1888 (sub n. 2456).
Obs. Conidia cylindracea (4–8 × 2,5–3 μ) utrinque truncata, chlorina.

448. Trullula phyllostictoides Speg. (n. sp.)
Diag. Maculigena; acervuli sparsi minuti olivacei; conidia cylindracea sterigmatibus simplicibus suffulta, chlorina.
Hab. Ad folia viva *Myrtaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2777).
Obs. Maculae amphigenae orbiculares determinatae superne cinerascenti-albidae inferne subfulvescentes; acervuli hemisphaerici (180-200 μ dm.) primo tecti dein erumpentes sparsi olivacei; conidia cylindracea (4–5 × 2 μ) utrinque truncata catenulata subolivacea, sterigmatibus simplicibus (15–20 × 1 μ) dense fasciculatis suffulta.

449. Melanconium phyllostictoide Speg. (n. sp.)
Diag. Maculae amphigenae majusculae sordide fulvescentes determinatae; acervuli minuti sparsi atri; conidia discoidea e latere compressa subopace fuliginea.
Hab. Ad folia viva *Zanthoxyli* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sub n. 2764).
Obs. Maculae irregulariter orbiculares (5–20''' dm.) saepe confluentes ac totum fere folium occupantes, determinatae sordide fulvo-fuscescentes areola strictissima rufescenti-fusca cinctae; acervuli amphigeni dense in maculis sparsi e lenticulari conoidei (200 μ dm.) primo tecti mox erumpentes atri; conidia e fronte discoidea (6-8 μ dm.) e latere compressa 1-guttulata fuliginea. Species pulchella conidiis, *Lasmeniarum* sporulis simillimis!

450. Pestalozzia versicolor Speg.

Var. *americana* Speg. — Fung. arg. pug. IV, n. 310.

Hab. Ad folia languida v. emortua *Drymidis* ac *Bignoniae* cujusdam in nemorosis prope *Apiahy*, per ann. 1881-88 (sub n. 1629-2484).

451. Cylindrosporium septorioide Speg. (n. sp.)

Diag. Maculae orbiculares fulvescentes determinatae ; acervuli minuti erumpentes ; conidia filiformia 3-5-septulata hyalina.

Hab. Ad folia subcoriacea *Hireae* speciei cujusdam in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2366).

Obs. Maculae orbiculares (1-2''' dm.) fulvescentes determinatae areola latiuscula sanguineo-purpurea cinctae sparsae ; acervuli amphigeni in centro macularum 3-10-aggregati primo tecti dein erumpentes lenticulares (60-80 μ dm.) fusciduli ; conidia filiformia superne saepe subattenuata utrinque acutiuscula (30-40 × 2 μ) recta v. subcurvula, 3-5-septata, ad septa non constricta, hyalina.

HYPHOMYCETEAE Mart.

452. Chromosporium fulvum (B. et C.) Sacc. — Syll. hyph. f. 6.

Hab. Ad cortices dejectos putrescentes muscosos in sylvis prope *Apiahy*, per ann. 1881-82 (sub n. 1562-2348).

Obs. Effusum v. hinc inde glomeruloso-pulvinatum pulverulento-compactiusculum, in juventute fulvo-ferrugineum per aetatem subcinnamomeum ; hyphae repentes graciles (6 μ crs.) densiuscule intricato-ramulosae septulatae, non evanescentes ; conidia obovata (18-30 × 10-20 μ) rarius

subglobosa majuscule 1-guttulata laevia, pulchre fulvo-cinnamomea.

453. Oidium erysiphoide Fr. — Sacc., l. c. f. 41.

Hab. Ad folia viva *Verbenae scopariae* in campis prope *Apiahy*, vere 1888 (sub n. 2458).

Obs. Conidia cylindracea (20-25 × 12-15 μ) utrinque subtruncato-rotundata laevia hyalina.

454. Verticillium ? lichenicolum Speg. (n. sp.)

Diag. Acervuli minuti candidi; hyphae alterne ramosae, ramulis 1-v. 2-dichotomis, apice verticillato-sterigmatophoris ; conidia ellipsoideo-hyalina.

Hab. In margine apotheciorum *Physciae* et *Peltigerae* cujusdam, Hiem. 1880 (sub n. 127).

Obs. Acervuli gossypino-compactiusculi gregarii saepeque confluentes globuloso-difformes (250-400 μ dm.); hyphae primariae erectae (120-200 × 4-5 μ) septulatae hyalinae alterne ramosae ; ramuli solitarii v. geminati (30-60 × 3 μ) divaricatuli semel v. bis dichotomi ; ramuli apice 3 sterigmatibus subampulluliformibus (7-8 × 3 μ) coronati ; conidia in sterigmatibus acrogena solitaria ellipsoideo-obovata (4-5 × 2,5 μ) continua hyalina.

455. Verticillium? enecans Speg. (n. sp.)

Diag. Candidum tenue; hyphae subrepentes flexuose alterniramosae, apice 3-9 sterigmatibus ampulluliformibus coronata ; conidia subellipsoidea hyalina.

Hab. In *Agarico* quodam pusillo ad corticem indeterminatum prope *Apiahy*, Aut. 1881 (sub n. 1643).

Obs. Hyphae graciles (3-4 μ crs.) subcontinuae dense gossypinulo-intertextae totam matricem vestientes base repentes antice subexsurgentes alterni-ramosae hyalinae ; ramuli breviusculi (50-80 × 3 μ) divaricatuli continui ; sterigmata in apice ramulorum verticillata monospora ;

conidia ex obovato ellipsoidea (4-5 × 2 μ) saepe grosse 2-guttulata continua hyalina.

456. Didymaria muscigena Speg. (n. sp.)

Diag. Candida, gossypinula; hyphae longiusculae atque crassiusculae, parce ramulosae apice obtusae; conidia cylindracea utrinque obtusa 1-septata hyalina.

Hab. Ad urnas languidas *Rhyncostegii* speciei cujusdam in nemorosis prope *Apiahy*, Aut. 1880 (sine n.).

Obs. Hyphae hyalinae laxe septulatae (100–250 × 10 μ) dense intertextae apice monosporae; conidia cylindracea v. subclavulata (40–60 × 7-10 μ) medio 1-septata, non constricta, nubiloso-farcta hyalina.

457. Helicotrichum olivaceum Speg. (n. sp.)

Diag. Coespituli maculiformes effusi olivacei; hyphae erectae apice circinatae fusco-olivaceae laeves; conidia cylindracea hyalina.

Hab. Ad folia dejecta putrescentia *Drymidis* speciei cujusdam in nemorosis prope *Apiahy*, Aut. 1889 (sub n. 1540).

Obs. Coespituli compactiusculi irregulariter lateque (1–10''' dm.) effusi, applanati; hyphae dense constipatae deorsum opacae erectae apice plus minusve circinatae (50–80 × 3-4 μ) pellucidae fusco-olivaceae v. subfuligineae, laevissimae; conidia e strato proligero tenuissimo fusco inter bases hypharum oriunda, e cylindraceo fusoidea (12 × 1,5 μ) apice acutiuscula, base subtruncata continua hyalina.

458. Circinotrichum maculiforme Nees. — Sacc., l. c. f. 315.

Hab. Ad folia dejecta putrescentia in sylvis prope *Apiahy*, Aut. 1888 (sub n. 2716).

459. Cercospora rosicola Pass. — Sacc., l. c. f. 460.

Hab. Ad folia viva *Rosae centifoliae* in hortis prope *Apiahy*, Aut. 1881 (sub n. 1548).

460. Cercospora hyptidis Speg. (n. sp.)

Diag. Maculae amphigenae fulvescentes subdeterminatae; coespituli laxe gregarii subpenicilliformes olivacei; conidia bacillari-clavulata multiguttulata hyalina.

Hab. Ad folia viva *Hyptidis* speciei cujusdam in dumetis prope *Apiahy*, Aut. 1880 (sub n. 2477).

Obs. Maculae subarescentes irregulariter expansae saepe confluentes (5-20''' dm.) sordide fusco-fulvescentes subdeterminatae; coespituli saepius epiphylli in centro macularum laxe aggregati erecti (140-150 × 20 μ) rigiduli, ex hyphis continuis teretibus (5 μ crs.) pellucido-olivascentibus, apice noduloso-incrassatulis ac liberis efformati; conidia acrogena vermiculari-clavulata (25-50 × 4-5 μ) utrinque obtusiuscula rectiuscula 10-12-pseudoseptata, primo hyalina dein fumosa. Species inter *Isariopsidem* et *Cercosporam* media.

461. Cercospora violae Sacc. — l. c. f. 434.

Hab. Ad folia languida *Violae odoratæ* in hortis prope *Apiahy*, Aut. 1888 (sub n. 2615).

462. Cercospora mitracarpi Speg. (n. sp.)

Diag. Maculae sordide fulvescentes indeterminatae subamphigenae; coespituli epiphylli dense constipati olivacei; conidia ellipsoideo-clavulata 3-5-septata pallide fuliginea.

Hab. Ad folia viva *Mitracarpi* speciei cujusdam in campis prope *Apiahy*, Aut. 1888 (sub n. 2607).

Obs. Maculae indeterminatae majusculae saepe totum folium ambientes superne pallescentes inferne fulvescentes saepe obsoletae sed fere semper ad epiphyllum concentrice rugosae; coespituli epiphylli erectuli (80-130 × 28-30 μ) saepe totam maculam obtegentes e 5 v. 20 hyphis laxe

subfasciculatis base tantum conjunctis apice obtusis 3-7-septatis laevibus pellucidis olivaceis efformati; conidia e cylindraceo clavulata (30-40 × 9-14 μ) apice obtuse rotundata base attenuato-truncata 4-6-locularia, loculis saepius nucleo majusculo cruciformi praeditis, laevia, pellucida fuligineo-olivacea.

463. Napicladium Ravenelii (B. et C.) Speg. — Fung. guar. pug. II, n. 193.

Hab. Ad paniculas vivas *Sporoboli* speciei cujusdam in pratis prope *Apiahy*, Aut. 1888 (sub n. 2619).

464. Napicladium anomalum Speg. (n. sp.)

Diag. Pulvinuli epiphylli asteromatoidei fusco-olivacei, hyphis repentibus septulatis ramulosis compositi; conidia fusoideo-falcatula 5-11-septata, in latere concavo tantum constricta, majuscula olivaceo-fuliginea.

Hab. Ad folia coriacea plantae cujusdam ignotae in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1701).

Obs. Hyphae dense intertexto-ramulosae repentes graciles (5 μ crs.) plagulas crustaceas orbiculares (3-5''' dm.) tenuissimas arcte matrici adnatas fusco-olivaceas saepe confluentes epiphyllas efficientes, hyphopodiis destitutae non torulosae vix pellucidae; conidia pleurogena e fusoideo clavulata (80-120 × 10 μ) utrinque attenuata apice acutiuscula base subtruncata leniter falcata, e latere concavum tantum constricta, pellucida fusco-v. fuligineo-olivacea, laevia.

465. Stilbum physaroide Speg. (n. sp.)

Diag. Sparsum v. laxissime subgregarium erumpens; stipes erectus sordide lateritio-cinnabarinus gracilis compressus capitulo globoso-hemisphaerico minuto carneo coronatus; conidia obovata hyalina.

Hab. Ad corticem adhuc virentem arboris cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1560).

Obs. Stipites e cortice erumpentes solitarii v. hinc inde laxe gregarii erecti (1-2''' lg. × 100-150 μ crs.) rectiusculi rigiduli apicem versus gradatim attenuati compressuli torti; capitulum laeve subglobosum (400-600 μ dm.) inferne applanatum v. subumbilicatum, compactiusculum carneum; conidia laevia ellipsoideo-obovata (6-7 × 3-4 μ) superne obtuse inferne acute rotundata, grosse 1 v. 2-guttulata, hyalina. Species pulchella *Physari* habitu donata.

466. Stilbum cinnabarinum Mntgn. — Sacc., l. c. f. 571.

Hab. Ad cortices vetustos, in consortione *Megalonectriae pseudotrichiae* (A. et S.) Speg., prope *Xiririca* et *Apiahy*, Jan. 1881 (sine n.).

467. Stilbum fusco-cinnabarinum Speg. (n. sp.)

Diag. Solitarium v. parce laxeque aggregatum; stipes erectus fusco-cinnabarinus teres rectus capitulo ovato v. glandiformi fulvo-rubro minuto coronatus; conidia ellipsoideo-ovata hyalina.

Hab. Ad corticem putrescentem arborum, in consortione *Megalonectriae coespitosae* Speg., Aut. 1888 (sub n. 2863).

Obs. Stipites quandoque solitarii quandoque 1 v. 2, in consortione stati ascophori, erecti (2-4''' lg. × 150-250 μ crs.) rigiduli recti teretes glabri laeves deorsum rubro-testacei sursum fusco-cinnabarini v. sanguinei, simplices, apice capitulo ovato v. glandiformi (400-800 μ dm.) rufo-sanguineo compactiusculo coronati; conidia ex ellipsoideo obovata (4-6 × 3 μ) recta v. leniter inaequilateralia, eguttulata laevia hyalina.

468. Isaria melanopus Speg. (n. sp.)

Diag. Sparsa v. gregaria; stipites erecti teretes coriacei base atri apice pallidi, capitulo clavulato carneo-aurantio coronati; conidia e cylindraceo obovata hyalina.

Hab. Ad corpora putrescentia *Coleopterorum* in truncis cariosis et muscosis prope *Apiahy*, Aut. 1888 (sub n. 2335).

Obs. Species statum conidicum *Cordicipitis australis* Speg. facillime sistens; stipites glabri rectiusculi laeves (1-5''' lg. × 150-200 μ crs.); capitula plus minusve evoluta in stipite decurrentia (0,5-1''' lg. × 250-500 μ crs.) laevia; sterigmata cylindracea (10-15 × 3 μ) apice integra obtusiuscula hyalina; conidia elliptico-v. obovato-cylindracea (5-10 × 3-4 μ) utrinque v. apice tantum rotundata. Species inter *Stilbum* et *Isariam* nutans.

469. Ceratium hydnoide (Jaq.) Alb. et Schw. — Sacc., l. c. f. 596.

Hab. Ad truncos emarcidos cariosos in sylvis prope *Apiahy*, Hiem. 1882 (sub n. 2358).

Obs. Stipites erecti (2-3''' lg. × 0,5''' crs.) apice parce furcato-ramulosi, ramulis gracilibus (30-50 μ crs.) apice obtusis ubique sterigmatibus horizontaliter patulis (5-7 × 1,5 μ) obtusis vestitis; conidia globosa (8 μ dm.) laevia hyalina.

470 Stysanus calycium Speg. (n. sp.)

Diag. Laxe gregarium superficiale atrum; stipites erecti teretes atri, capitulo subgloboso subpulverulento atro-olivaceo coronati; conidia globosa minuta obscure olivacea.

Hab. Ad palos decorticatos putrescentes in hortis prope *Apiahy*, Aut. 1881 (sine n.).

Obs. Species statum conidicum *Calycii peraffinis* Speg. sistens; substratum saepius late dealbatum saepeque minutissime albo-v. hyalino-squarrulosum; stipites recti rigidi-

duli plus minusve elongati graciles (1-2''' lg. × 100-150 μ crs.) laeves; capitulo superne hemisphaerico inferne subturbinato (200-250 μ dm.); conidia e globoso ellipsoidea (4-5 μ dm.) 1-guttulata laevia. An huc *Sporocybe calycioides* Fr.?

471. Podosporium penicillium Speg. — Fung. arg. pug. IV, n. 117!

Hab. In mycelio *Meliolae calvae* Speg. parasitans ad folia *Laurineae* cujusdam, *Apiahy*, Jun. 1881 (sub. n. 1507).

Obs. Stipites atri sparsi v. laxe hinc inde gregarii erecti (300-400 μ alt. × 25 μ crs.) teretes rigiduli apice abrupte penicillatim ramoso-expansi, e fibris gracilibus (5 μ crs.) arcte coalitis fuligineis parce septulatis laevibus apice liberis (p. lib. 150-160 μ lg.) verruculoso-scabris monosporis efformati; conidia in fibris penicillorum acrogena, cylindraceo-fusoidea (25-30 × 4-5 μ) sursum obtusiuscule attenuata deorsum elongatula, triseptata pallide fuliginea.

472. Tubercularia paraguaya Speg. — Fung. guar. pug. I, n. 423.

Hab. Ad corticem subputrescentem truncorum in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1645).

Obs. Conidia ellipsoidea (6-7 × 3 μ) hyalina.

473. Epicoccum purpurascens Erhb. — Sacc., l. c. f. 736.

Hab. Ad folia coriacea dejecta putrescentia in nemorosis propre *Apiahy*, Aut. 1888 (sub n. 2388 b).

Obs. Sporidochia hemisphaerico-globosa (180-200 μ dm.) fuliginea, macula destituta; conidia fere hemisphaerica (18-20 μ dm.) subopace fuliginea, episporio crassiusculo minutissime subverruculoso-punctulato, lineis pallidioribus reticulato donata, pedicello brevi turbinato hyalino suffulta.

474. Bizozzeriella phyllogena Speg. — Fung. guar. pug. II, n. 199.

Hab. Ad folia viva *Laurineae* cujusdam in dumetis prope *Apiahy*, Aut. 1881 (sub n. 1614).

Obs. Specimina brasiliensia a guaraniticis nonnihil recedunt; hypothallo magis expanso; lamellis v. denticulis hymenialibus magis evolutis exertisque, zona fertili idcirco pulchre fulvello-villosula v. subhispida; conidia catenulata cylindracea (15-16 × 2,5-3,5 μ) leniter inaequilateralia utrinque obtusa, ac cauda acutissima longiuscula (5-7 μ lg.) aucta.

475. Aschersonia oxyspora Brk. — Sacc., l. c. f. 620.

Hab. Ad folia viva *Myrtaceae* cujusdam in sylvis prope *Apiahy*, Aut. 1888 (sine n.).

Obs. Stromata discoidea (1-2''' dm.) armeniaca breviter pulvinulata glabra laevia base hypothallo furfuraceo-flocculoso subradiatim expanso cincta, superne depresso-concava ac subsuccinea, contextu dense fibroso-intricato, fibris subintestiniformibus (2 μ crs.) breviter ramulosis efformato; conidia cylindraceo-fusoidea utrinque caudula breviuscula acutissima aucta (14-15 × 2-2,5 μ), continua hyalina catenulata, catenulis paraphysibus filiformibus rigidulis (60-80 × 1-1,5 μ) concoloribus immixtis. Genus eximie a *Bizozzeriella* distinctum, et melius inter *Tubercularieas mucedineas* quam inter *Nectrioideas* militare debet.

476. Patellina buellioides Speg. (n. sp.)

Diag. Superficialis cupulato-discoidea sporidochio candido epithecio aurantio donata; conidia ellipsoideo-cylindracea hyalina.

Hab. Ad corticem lichenosum adhuc viventem in sylvis prope *Apiahy*, Aut. 1881 (sub. 1665-1704).

Obs. Cupulae pulchellae inter lichenes (an ex illis) erumpentes dein subsuperficiales applanatae primo minute or-

biculares (0,5 — 1''' dm.) dein magis explanatae irregulariter repandulae, epithecio aurantiaco margine strictissimo sed bene distincto albo cinctae, extus sordide albescentes laeves; sporophorae dense constipatae ac subcoalescentes (20-30 × 1 μ) hyalinae apice acutiusculae monosporae; conidia subcylindracea v. ex obovato ellipsoidea utrinque obtusiuscula (4-6 × 1,5-2,5 μ) continua eguttulata. Species pulchella in juventute praecipue apotheciis *Buelliae* cujusdam simillima.

PATOULLARDIELLA Speg. (n. gen.)

Char. Sporidochium laeticolor ceraceum subdiffluens; sporophora filiformia monospora; conidia acrogena elongata didyma hyalina.

Genus Cl. *N. Patoullard*, eximio mycologo gallico, qui hujus generis natura suspicatus est.

477. PATOULLARDIELLA GUARANITICA Speg. (*Gymnosporangium? guaraniticum* Speg., Fung. guar. pug. I, n. 106. — *Tubercularia Spegazzinii* Pat., Revue myc. 1889, f. 35).

Hab. Ad ramulos et folia viva *Sapindaceae* cujusdam in dumetis prope *Apiahy*, Aut. 1888 (sine n.).

Obs. Pulvinuli primo epidermide tecti longitudinaliter erumpentes, in juventute compactiusculi per aetatem submucoso-diffluentes aurantiaci; sporophorae filiformes praelongae (50-100 × 1-1,5 μ) hyalinae simplices rectae muco junctae; conidia ellipsoideo-elongata v. elongato-subbiconica medio 1-septata non constricta (10-20 × 3-4 μ) hyalina.

478. BACTRIDIUM FLAVUM K. et S. — Sacc., l. c. f. 691.

Hab. Ad ligna folia atque pyrenomycetes majores subputrescentes vulgatum in nemorosis prope *Apiahy*, per ann. 1881-88 (sine n. et sub n. 2345).

Obs. Specimina brasiliensia a typo nonnihil recedunt coni-

diis submajoribus; acervuli pulvinulati, primo compactiusculi subtremelloidei dein subpulverulenti pallide aurantiaci (1–3''' dm. × 1-1,5''' crs.) saepe base subcoarctati substipitati, rarius effusi, plus minusve dense gregarii; conidia clavulata (200–250 × 40-50 μ), 6-7-pseudoseptata non constricta, sporophora longiuscula (80-100 × 10 μ) 1-3-septata suffulta, ex aurantio hyalina. An huc *B. fulvellum* Brk.?

479. Fusarium heterosporum Nees. — Sacc., l. c. f. 707.

Hab. Ad cariopsides languidas *Paspali* speciei cujusdam in pratis prope *Apiahy*, Maj. 1888 (sub n. 2878).

Obs. Acervuli effusi tremelloideo-ceracei pallide aurantio-carnei partem superam cariopsidis hypertrophicae obtegentes; sporophora breviter bis v. ter dichotoma; conidia fusoidea (30–50 × 4–5 μ) leniter falcata utrinque acutiuscula, 3–5–septata hyalina. An varietas?

MYCELIA STERILIA

480. Antennaria heteracantha Speg. (n. sp.)

Diag. Crassa, pannoso-subsuberosa fusco-atra; hyphae repentes crassae, ramulis quandoque spiniformibus rectis quandoque torulosis falcatis.

Hab. Ad corticem arborum viventium in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1577).

Obs. Hyphae crassae (30 μ crs.) repentes dense intricatae, ramulis alternis secundis atro-olivaceis, aliis spiniformibus rigidis acutissimis vix apice pellucidis, aliis conidiiformibus subflaccidulis torulosis, articulis e globoso cuboideis (15 × 15 μ), minute excentrice 1–guttulatis pellucidis. An huc *A. pannosa* Brk.?

Species sub nomine *Fumaginis pannosae* (Brk.), in Fung. fueg. n. 453 edita, est *Fumago scoriadea* (Brk.).

481. Anthina? muscigena Speg. — Fung. arg. pug. IV, n. 364.
Hab. Ad muscos vivos in caudicibus vetustis vulgata prope *Apiahy*, per ann. 1881-88 (sine n. et sub n. 2898).

482. Anthina? brasiliensis Speg. — l, c. n. 365.
Hab. Ad ramulos vivos, sociis *hepaticis*, in sylvis prope *Apiahy*, Aut. 1880 (sine n.).

483. Hymantia argiroleuca Speg. (n. sp.)
Diag. Tenuissime membranacea arctissime matrici adnata latissime expansa, indeterminata v. margine crenulato-repanda subfibrillosa ex albo argentea subsericeo-nitens.
Hab. Ad folia *Laurineae* cujusdam dejecta putrescentia in nemorosis prope *Apiahy*, Aut. 1888 (sub n. 2466).
Obs. Status quiescens *Pani hymenorhyzi* Speg.

484. Sclerotium mirabile Speg. (n. sp.)
Diag. Epiphyllum conoideum majusculum, extus atrum opacum, intus album sublignosum.
Hab. Ad folia viva *Laurineae* cujusdam in sylvis prope *Apiahy*, Aut. 1881 (sub n. 1614).
Obs. Statum quiescentem *Dothideaceae* cujusdam sine dubio sistens, saepius conoideum (10''' alt. $\times$ 8-9''' lt. bas.) base late matrici innato-adnatum, rarius versiforme; contextus carnis fibrosus, ex hyphis crassis (5-8 μ crs.) dense ramoso-intertextis tenuissime canaliculatis hyalinis efformatus.

INDICE DEL TOMO XI

CONTENIDO DE LA PRESENTE ENTREGA

PARTE CIENTÍFICA

